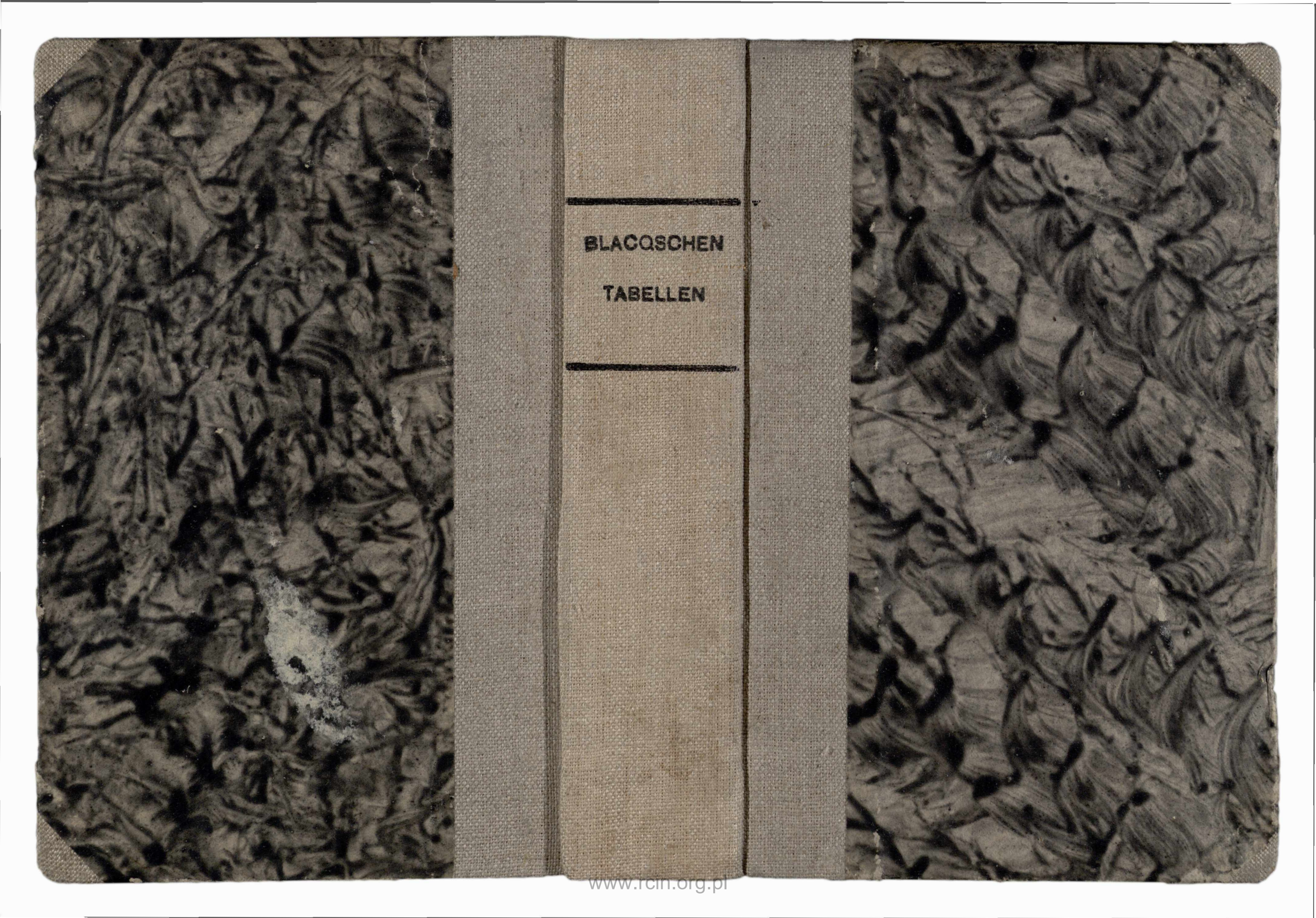
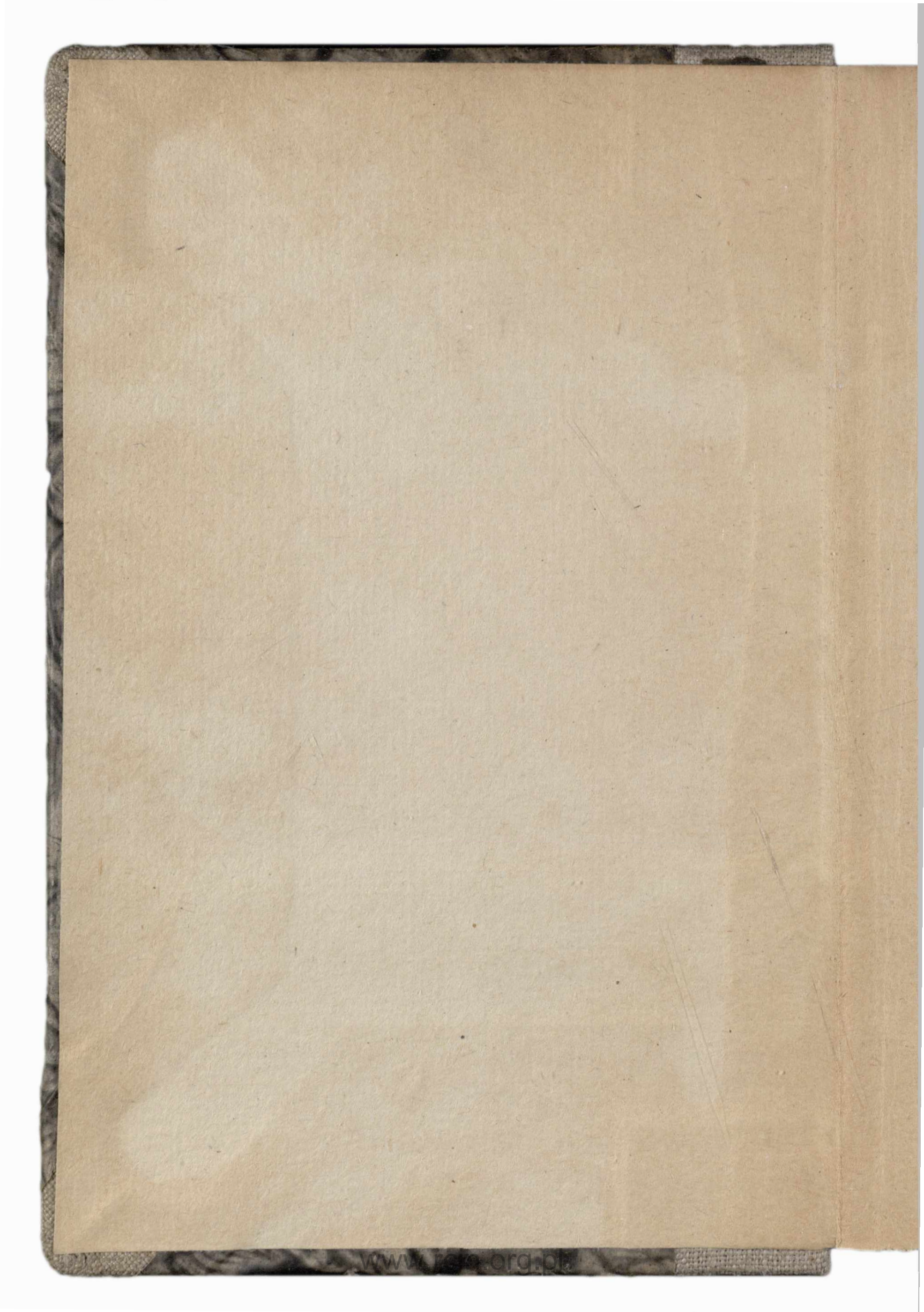


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Opis nr 46086

Opis nr 46351

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Adrian Vlacqs

Tabellen

der

Sinus, Tangenten

und

Secanten,

nebst den

Logarithmen

der

Sinus und Tangenten,

ingleichen

aller ganzen Zahlen von 1 bis 10000.

Neueste verbesserte und mit andern nützlichen Tabellen vermehrte Auflage,

herausgegeben

von

Johann Jacob Ebert.

Leipzig, 1805
in Johann Benjamin Georg Fleischers Buchhandlung.

BIBLIOTEKA
A. CZAJEWICZA

5558

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Dem

Hochwohlgebohrnen Herrn

Herrn

Christoph Gottlob von Burgsdorf,

Sr. Churfürstl. Durchl. zu Sachsen hochverordneten Präsidenten des Kirchenraths und Oberconsistorii zu Dresden,

Seinem gnädigen und hochgebiethenden

Herrn,



GABINET MATEMATYCZNY
Towarzystwa Naukowego Warszawskiego

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widmet

diese neue Auflage

der

Blacqschen Tabellen

mit der

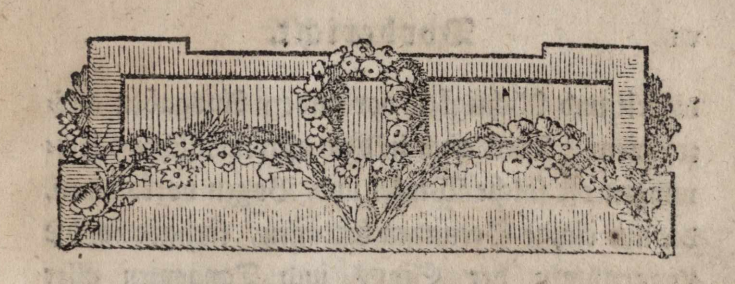
vollkommensten Ehrerbietung



der

Herausgeber.

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Vorbericht.

Die kleinen Vlacqschen Tabellen, von denen hier eine neue Ausgabe geliefert wird, haben das Unglück gehabt, wie Herr Vega in der Vorrede zu der schätzbaren Ausgabe seiner trigonometrischen und logarithmischen Tafeln mit Recht erinnert, bey jeder neuen Auflage immer fehlerhafter zu werden. Ich war daher genöthiget, eine neue und sorgfältige Revision dieser Tafeln anzustellen, und dabey diejenigen Ausgaben zu Rathe zu ziehen, die sich durch Vollständigkeit

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digkeit und Richtigkeit vor andern Ausgaben aus-
zeichnen. Weil auch in den astronomischen Rech-
nungen oft solche Winkel und Bogen vorkommen,
die nur einige Secunden betragen, so habe ich die
Logarithmen der Sinus und Tangenten aller
einzelnen Secunden des ersten Grades beygefügt,
die natürlichen Sinus und Tangenten selbst aber,
weil man sie entbehren kann, weggelassen. Von
den letzten beyden Tafeln, womit diese Auflage
vermehrt worden ist, enthält die eine die Qua-
drat- und Cubikzahlen, die andere aber die Qua-
drat- und Cubikwurzeln aller ganzen Zahlen von
1 bis 1000, die wohl niemand für überflüßig
halten wird, der nur einigermaßen mit mathe-
matischen Rechnungen bekannt ist. Um nun
Platz zu gewinnen, und keine allzu große Ver-
mehrung der Bogenzahl und des Preises zu ver-
ursachen, habe ich den größten Theil der Einlei-
tung, worinnen von der Berechnung der gerade-
linichten und sphärischen Triangel gehandelt wird,
nebst dem Anhange, der astronomische Aufgaben
ent-

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enthält, ganz weggelassen, und nur das erste Capitel vom Gebrauch dieser Tabellen beybehalten. Denn diejenigen, die schon eine Kenntniß der Trigonometrie und Astronomie haben, können diese, nur zu Vergrößerung des Buchs und des Preises dienende Anleitung entbehren; diejenigen aber, denen diese Kenntniß mangelt, werden dadurch selten in den Stand gesezt werden, trigonometrische und astronomische Aufgabeu allezeit richtig aufzulösen, wie mich die Erfahrung mehr als einmal gelehrt hat. Einer meiner Freunde gab mir zwar den Rath, noch mehr Vermehrungen bey dieser neuen Auflage anzubringen, und die Logarithmen der natürlichen Zahlen bis auf 100000 fortzusetzen. Allein durch Befolgung dieses Raths würde ich der Absicht zuwider gehandelt haben, welche man durch solche kleine, nur für die ersten Anfänger und für unbemittelte Liebhaber bestimmte Tafeln zu erhalten sucht. Denn für diejenigen Liebhaber der Mathematik, die mehr brauchen und mehr bezahlen können, ist auch in

Deutschland schon durch die schöne Sammlung logarithmischer und trigonometrischer Tafeln, welche Herr J. C. Schulze 1778 zu Berlin herausgegeben hat, und durch des Herrn Georg Vega bereits oben gerühmte, zu Wien 1783 gedruckte Ausgabe logarithmischer, trigonometrischer und anderer, zum Gebrauch der Mathematik eingerichteter Tafeln hinlänglich gesorgt worden. Geschrieben zu Wittenberg in der Ostermesse 1790.

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Einleitung.

Von dem Gebrauch dieser Tabellen.

Weil nicht in allen Anleitungen zur Arithmetik und Trigonometrie von dem Gebrauch der trigonometrischen und logarithmischen Tabellen besonders, wenigstens nicht immer ausführlich, gehandelt wird, und auch nicht alle Ausgaben solcher Tafeln auf einerley Art eingerichtet sind, so soll hier, den Anfängern zum Besten, eine kurze Erläuterung, den Gebrauch dieser Tafeln betreffend, vorausgeschickt werden.

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Die erste Tafel enthält die Sinus, Tangenten und Secanten, nebst den Logarithmen der Sinus und Tangenten bis auf einzelne Minuten. Die Logarithmen der Secanten sind schon in den vorigen Ausgaben weggelassen worden, weil man sie in den gewöhnlichen trigonometrischen Rechnungen nicht nöthig hat, und weil man sie in den Fällen, wo man sie braucht, doch leicht vermittelst der Logarithmen der Sinus finden kann, wie bald gezeigt werden soll. Auf der andern Seite in eben derselben Linie stehen allemal die Sinus, Tangenten und Secanten der Complementswinkel, d. i. derjenigen, die mit dem auf der ersten Seite befindlichen Winkel 90 Grad ausmachen. Wenn man also den Cosinus, oder Cotangenten, oder Cosecanten eines Winkels wissen will, so darf man nur diesen Winkel aufsuchen, und den Sinus, Tangenten oder Secanten desjenigen Winkels nehmen, der auf der andern Seite in eben derselben Reihe steht. Würde z. B. der Cosinus eines Winkels von 25 Grad. 40 Minuten verlangt, so suche man 25 Gr. 40 Minuten in dieser Tabelle auf, und nehme den Sinus von demjenigen Winkel, der auf der andern Seite in eben derselben Zeile steht, d. i. den Sinus des Winkels von 64°, 20′, welcher nothwendig der Cosinus des Winkels von 25°, 40′ seyn muß; weil beyde Winkel zusammen genommen gerade 90 Grad ausmachen.

Die zweyte Tabelle, welche in den vorhergehenden Auflagen dieser Tafeln nicht befindlich ist, enthält die Logarithmen der Sinus und Tangenten aller einzelnen Sekunden des ersten Grades, doch ohne die Logarithmen der

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der Cosinus und Cotangenten, die sich leicht berechnen lassen, wie die zweyte Aufgabe lehret.

In der dritten Tafel findet man die Logarithmen aller ganzen Zahlen von 1 bis 10000, durch deren Hülfe sich auch die Logarithmen solcher Zahlen, die man nicht in dieser Tabelle antrifft, ohne weitläuftige Rechnung finden lassen, wovon die dritte Aufgabe ein Beyspiel enthält.

Die vierte Tafel liefert die Quadrat- und Cubikzahlen der ganzen Zahlen von 1 bis 1000, und die fünfte die Wurzeln aus diesen Zahlen bis auf sieben Decimalstellen. Kommen größere Zahlen vor, als die in dieser Tabelle befindlichen, so kann man sich derselben doch bey Ausziehung der Quadrat- und Cubikwurzel zur Erleichterung der Rechnung mit großem Vortheil bedienen, wie man aus der letzten Aufgabe ersehen wird.

Erste Aufgabe.

Den Logarithmus einer Secante zu finden.

Auflösung.

Weil sich der Cosinus eines Winkels zum Halbmesser oder Sinus totus eben so verhält, wie der Sinus totus zur Secante desselben Winkels, und weil die Logarithmen

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rithmen solcher Zahlen, die sich in einer geometrischen Proportion befinden, eine arithmetische Proportion ausmachen, so läßt sich der Logarithmus einer Secante leicht finden, wenn man zum Logarithmus des Cosinus von dem gegebenen Winkel und zum Logarithmus des Sinus totus die dritte arithmetische Proportionalzahl sucht, d. i. wenn man den Logarithmus des Sinus totus doppelt nimmt, und hiervon den Logarithmus des Cosinus abzieht. Wird z. B. der Logarithmus der Secant von 33°, 7′ verlangt, so ist

der Logarithm. des Sinus totus	= 10,0000000
Dieser zweymal genommen	= 20,0000000
Logarithm. Cosin. von 33°, 7′	= 9,9230158
Folglich Log. Sec. von 33°, 7′	= 10,0769842

Zweyte Aufgabe.

Den Logarithmus von dem Cosinus eines kleinen Winkels zu finden, der noch keinen Grad beträgt.

Auflösung.

Weil sich bey nicht allzu kleinen Zahlen der Unterschied der Logarithmen fast eben so verhält, wie der Unterschied der Zahlen, so ziehe man erstlich den gegebenen Win-

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Winkel von 90 Gr. ab, um den Complementswinkel zu erfahren, und suche hernach in den Tafeln sowohl den nächst kleinern, als auch den nächst größern auf. Z. E. es sey der Winkel von 59′, 40″, d. i. 59 Minuten und 40 Secunden gegeben, dessen Cosinus verlangt wird, so beträgt der Complementswinkel 89°, 0′, 20″, und der nächst kleinere von den in diesen Tafeln befindlichen 89°, 0′, der nächst größere Winkel aber 89°, 1′, Nun ist

Log. 89°, 1′ = 9,9999360
Log. 89°, 0′ 20″ = x
Log. 89°, 0′ = 9,9999338

Der Unterschied zwischen der ersten und dritten Zahl beträgt 1′, oder 60″, der Unterschied zwischen der zweyten und dritten 20″, und der Unterschied zwischen den Logarithmen der ersten und dritten Zahl 22. Nun schließe man folgendergestalt: wie sich verhält der Unterschied zwischen der ersten und dritten Zahl (60), zu dem Unterschiede zwischen der zweyten und dritten Zahl (20), so verhält sich auch der Unterschied zwischen dem ersten und dritten Logarithmus (22), zu dem noch unbekannten Unterschiede zwischen dem mittlern und dritten Logarithmus. Durch Hülfe der Regeldetri findet man diesen Unterschied $7\frac{1}{3}$. Addirt man nun denselben mit Weglassung des Bruchs $\frac{1}{3}$,

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den man hier nicht braucht, zu dem kleinern Log. so erhält man 9,9999345, als den Logar. von 89°, 0′, 20″, d. i. den Log. Cosin. von 59′, 40″. Auf eine ähnliche Art findet man auch die Logarithmen von den Contangenten solcher kleinen Bogen, die noch keinen Grad betragen, ingleichen die Logarithmen der Sinus und Tangenten aller Winkel, die nicht nur in Graden und Minuten, sondern auch in Secunden gegeben werden.

Dritte Aufgabe.

Den Logarithmus einer Zahl zu finden, die grösser ist, als die in den Tabellen befindlichen Zahlen.

Auflösung.

Wenn sich die gegebene Zahl, z. B. 456000, als ein Product betrachten läßt, dessen Factoren sich in den Tabellen befinden, so addire man die Logarithmen dieser Factoren zusammen, um den Logarithmus der gegebenen Zahl zu erhalten; weil nach dem bekannten arithmetischen Lehrsatze der Logarithmus eines Products so viel beträgt, als die Snmme von den Logarithmen der Factoren. Die Zahl 456000 kann als ein Product aus 456 in 1000 betrachtet werden.

Nun

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Nun ist Log. 456=2,6589648
und Log. 1000=3,0000000

Folglich Log. 456000=5,6589648

Woraus man zugleich sehen kann, daß, wenn man eine Zahl durch einige, rechter Hand angehängte Nullen vermehrt, der Logarithmus in Ansehung der Decimalbrüche unverändert bleibt, und nur die Kennziffer um eben so viel Einheiten zunimmt, als man an die Zahl Nullen gesetzt hat. So muß auch umgewendet die Kennziffer eines Logarithmus um so viel Einheiten vermindert werden, als man von der dazu gehörigen Zahl rechter Hand Nullen weggenommen hat.

Ist aber die gegebene Zahl, z. B. 86759, nicht von dieser Art, so schneide man von der Linken gegen die Rechte so viel Ziffern ab, als man noch in den Tafeln antrifft. Hier könnte man also die ersten vier Ziffern 8675 nehmen. Nun suche man sowohl von dieser Zahl 8675, als auch von der nächst folgenden 8676 die Logarithmen in den Tafeln, und mache daraus, auf die vorhin angeführte Art, die Logarithmen der Zahlen 86750 und 86760, zwischen welche der verlangte Logarithmus von 86759 fallen muß. Man setze nemlich an diese Zahlen so viel Nullen, als man Ziffern in der gegebenen Zahl rechter Hand weggelassen hat, und vermehre die Kenn=

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Kennziffer der Logarithmen mit eben so viel Einheiten, als man Nullen zu den Zahlen gesetzt hat. Hierauf subtrahire man sowohl die Zahlen, als auch ihre Logarithmen von einander, um ihre Unterschiede zu erfahren, und schließe, wie bey der vorigen Aufgabe: wie sich der Unterschied der ersten und dritten Zahl zu dem Unterschiede der zweyten und dritten verhält, so wird sich auch der Unterschied des ersten und dritten Logarithmus zu dem Unterschiede des noch unbekannten mittlern und dritten Logarithmus verhalten. Durch Hülfe dieses, vermittelst der Regeldetri gesuchten Unterschiedes, wird der verlangte Logarithmus nunmehr leicht bestimmt. Nach den Tafeln ist

Log.	8676	= 3,9383195
und Log.	8675	= 3,9382695
folglich Log.	86760	= 4,9383195
und Log.	86750	= 4,9382695

Der Unterschied zwischen diesen beyden Zahlen beträgt 10, und zwischen ihren Logarithmen 500; der Unterschied zwischen der gegebenen Zahl 86759 und der kleinern 86750 aber ist 9, woraus sich der Unterschied zwischen dem kleinern und unbekannten mittlern Logarithmus finden läßt, wenn man zu diesen drey Unterschieden 10, 500 und 9 die vierte Proportionalzahl sucht, welche

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welche 450 ist. Dieser Unterschied zu dem kleinern Logar. 4,9382695 addirt, giebt den Logar. von 86759, nemlich 4,9383145.

Vierte Aufgabe.

Die zu einem in den Tafeln nicht enthaltenen Logarithmus gehörige Zahl zu finden.

Auflösung.

Es kommen hier drey Fälle vor. Denn ein Logarithmus steht entweder nur in Ansehung der Decimalbrüche aber nicht in Ansehung der Kennziffer, oder in Ansehung der Kennziffer, aber nicht in Ansehung der Decimalbrüche, oder weder in Ansehung der Kennziffer, noch in Ansehung der Decimalbrüche in den Tabellen.

Der erste Fall, der aber selten vorkömmt, ist der leichteste. Denn findet man den gegebenen oder durch Rechnung erhaltenen Logarithmus, z. B. 6,8253612, zwar in Ansehung der Decimalbrüche, aber nicht in Ansehung der Kennziffer in den Tabellen, so darf man nur zu der Zahl des in den Tafeln befindlichen Logarithmus, welcher dem gegebenen in Ansehung der Decimalbrüche gleicht, so viel Nullen rechter Hand hinzu setzen, als der Unterschied zwischen der Kennziffer des gegebenen und

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der Kennziffer des ähnlichen Logarithmus, den man in den Tafeln findet, beträgt. Dem Logarithmus 6,8253612 gleicht in Ansehung der Decimalbrüche der Logarithmus von 6689, nemlich 3,8253612. Weil nun die Kennziffer dieses Logarithmus drey Einheiten weniger hat, als die Kennziffer des gegebenen, so müssen der ihm zugehörigen Zahl 6689 auch drey Nullen rechter Hand zugesetzt werden; wodurch die Zahl 6689000 entsteht, die nothwendig zu dem Logarithmus 6,8253612 gehören muß, wie ein jeder einsehen wird, der die Natur desjenigen logarithmischen Systems erwägt, welches bey diesen Tabellen gewählt worden ist, und wer die oben S. XIV gegebene Auflösung der dritten Aufgabe hinlänglich verstanden hat.

Findet man den Logarithmus zwar in Ansehung der Kennziffer: aber nicht in Ansehung der Decimalbrüche in den Tabellen, so ist dieses ein Merkmal, daß die ihm zugehörige Zahl unter die vermischten Zahlen, d. i. unter diejenigen gehört, die aus ganzen und gebrochenen Zahlen zusammengesetzt sind. Man nehme daher in diesem Falle sowohl den nächst kleinern, als auch den nächst grössern Logarithmus aus den Tabellen, und suche zwischen diesen beyden und dem gegebenen Logarithmus, der zwischen beyde fällt, die Unterschiede. Hierauf schließe man

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man wiederum wie oben S. XIII, folgendergestalt: wie sich verhält der Unterschied zwischen dem ersten und dritten, aus den Tabellen genommenen Logarithmen, zu dem Unterschiede zwischen dem ersten und mittlern, (oder zwischen dem mittlern und dritten) Logarithmus, so verhält sich auch der Unterschied zwischen der ersten nnd dritten Zahl zu dem noch unbekannten Unterschiede zwischen der ersten und mittlern (oder zwischen der mittlern und dritten) Zahl. Aus diesem, durch die Regeldetri zu suchenden Unterschiede läßt sich leicht die verlangte Zahl erhalten.

Wollte man z. B. die zu dem Logarithmus 3,9989346, welcher nur in Ansehung der Kennziffer, aber nicht in Ansehung aller Decimalbrüche in den Tabellen steht, gehörige Zahl wissen, so müßte man vor allen Dingen die beyden Logarithmen, zwischen welche er fällt, aufsuchen. Diese sind

3,9989564 = Log. 9976

und 3,9989129 = Log. 9975

Woraus man ersieht, daß die zu suchende Zahl kleiner als 9976, und größer als 9975 seyn, folglich aus 9975 und einem Bruche bestehen müße. Der Unterschied zwischen den beyden aus den Tabellen genommenen Logarithmen beträgt 435, wenn man die Nullen wegläßt, die man linker Hand hinzu setzen sollte, aber hier

 nicht

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nicht braucht; der Unterschied zwischen dem kleinern und dem gegebenen Logarithmus ist 217, und der Unterschied zwischen den Zahlen 9976 und 9975 nur 1; folglich 435 : 217 = 1 : x, und also der Unterschied $x = \frac{217}{435}$, und die gesuchte Zahl $9975\frac{217}{435}$ d. i. ohngefehr $9975\frac{1}{2}$.

Ist die Kennziffer des gegebenen Logarithmus 0, oder 1, oder höchstens 2, so kann man den Bruch geschwinder finden, wenn man den Logarithmus unter einer größern Kennziffer aufsucht, und sobald man einen in Ansehung der Decimalbrüche ihm gleichen oder nahe kommenden Logarithmus gefunden hat, von der dazu gehörigen Zahl so viel Ziffern rechter Hand zu Decimalbrüchen macht, als der Unterschied zwischen der Kennziffer dieses und des gegebenen Logarithmus beträgt. Hätte man z. B. 0,9383183, als den Logarithmus einer Linie gefunden, deren Länge man gern durch Ruthen, Schuh u. s. f. bestimmen möchte, so würde man weder diesen, noch einen ihm sehr nahe kommenden Logarithmus unter der Kennziffer 0 in den Tabellen finden. Der nächst kleinere ist 0,9030900, nemlich der Logarithmus von der Zahl 8, und der nächst größere 0,9542425 = Log. 9, zwischen welche der obige Logar. 0,9383183 fällt. Hieraus ersieht man also, daß die dazu gehörige Zahl, oder die verlangte Länge der zu bestimmenden

Linie

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Linie etwas größer als 8, und kleiner als 9 Ruthen seyn müsse.

Sucht man nun unter den höhern Kennziffern einen in Ansehung der Decimalbrüche ähnlichen Logarithmus auf, so findet man folgenden, der ihm sehr nahe kömmt:

$$3,9383195 = \text{Log. } 8676$$

Weil aber die Kennziffer dieses Logarithmus um drey Einheiten größer ist, als die Kennziffer des Logarithmus 0,9383183, so muß man in der dazu gehörigen Zahl 8676 drey Ziffern von der Rechten gegen die Linke für Decimalbrüche abschneiden, und also aus der ganzen Zahl 8676 die vermischte Zahl 8,676 machen; woraus man nunmehr ersieht, daß die gesuchte Länge 8 Ruthen, 6 Schuh, 7 Zoll und 6 Linien, nach der geometrischen Decimal-Eintheilung, beträgt. Der Grund von dieser Regel liegt in dem bekannten arithmetischen Satze, daß man den Logarithmus eines Quotienten erhält, wenn man den Logarithmus des Divisors von dem Logarithmus des Dividends abzieht.

Weil nun Log. $8676 = 3,9383195$
und Log. $1000 = 3,0000000$

so ist Log. $\frac{8676}{1000} = \text{Log. } 8,676 = 0,9383195$

Wird endlich ein gegebener Logarithmus weder in Ansehung der Kennziffer, noch in Ansehung der Decimalbrüche in den Tabellen gefunden, so suche man denselben unter der nächst kleinern Kennziffer auf, und wenn man keinen mit eben denselben Decimalbrüchen antrifft, so nehme man nicht nur den nächst größern, sondern auch den nächst kleinern Logarithmus aus den Tabellen, und mache die Kennziffer eines jeden eben so groß, als die Kennziffer des gegebenen Logar. ist; zu den Zahlen dieser Logarithmen aber setze man rechter Hand so viel Nullen, als man Einheiten zu der Kennziffer der Logarithmen gesetzt hat. Hierauf subtrahire man sowohl die drey Logarithmen, als auch die Zahlen der beyden, aus den Tafeln genommenen Logarithmen von einander, und suche zu den beyden Unterschieden der Logrithmen und dem Unterschiede der Zahlen die vierte Proportionalzahl, welche, als der Unterschied zwischen der bekannten kleinern und der noch unbekannten Zahl, zu der kleinern addirt, die verlangte Zahl geben wird.

Fünfte Aufgabe.

Die Wurzel aus einer gegebenen Quadrat- und Cubikzahl, die nicht in den Tabellen enthalten ist, ohne weitläuftige Rechnung zu finden.

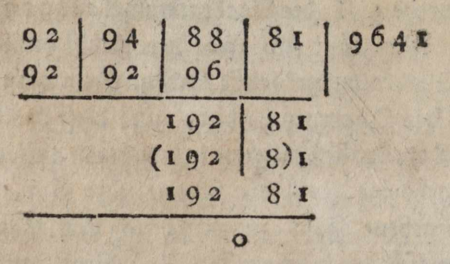
Auf-

Auflösung.

Es werde z. E. die Quadratwurzel aus 9294888I verlangt. Nun läßt sich zwar vermittelst der Logarithmen eine Quadratwurzel leicht finden, wenn man den Logarithmus des Quadrats halbirt, und diese Hälfte unter den in den Tabellen befindlichen Logarithmen aufsucht, weil die ihr zugehörige Zahl die Wurzel seyn muß. Allein ist die gegebene Zahl zu groß, so thut man besser, wenn man sich der vierten Tabelle bedient, und folgendergestalt rechnet. Man theile nemlich diese Zahl, wie gewöhnlich, in Classen ab, und gebe jeder Classe zwey Ziffern. Weil nun die größten von den in den Tabellen befindlichen Quadratzahlen nur aus 6 Ziffern bestehen, so suche man die Ziffern der ersten drey Classen, nemlich 929488, in der Tabelle unter den Quadratzahlen, und nehme, wenn man sie selbst nicht darinnen findet, das nächst kleinere Quadrat, welches im gegenwärtigen Falle 929296 ist. Diese Quadratzahl, deren Wurzel 964 die ersten drey Theile der verlangten Quadratwurzel ausmacht, ziehe man von den Ziffern der ersten drey Classen ab, setze zu dem Ueberreste die letzte Classe 81, verdopple die schon gefundenen drey Theile der Wurzel, und dividire damit die Ziffern 1928, um den vierten Theil 1 zu erhalten. Diesen Theil setze man rechter

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Hand an den Divisor, multiplicire damit die ganze Zeile, und ziehe das Product von der Zahl 19281 ab, wie folgende Rechnung zeigt:



Auf eine ähnliche Art verfährt man bey Ausziehung der Cubikwurzeln, wenn man nur hierbey die besondern Regeln beobachtet, welche diese Rechnung erfordert.

Cano-

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CANONES SINVVM, TANGENTIVM, SECANTIVM; ET LOGARITHMORVM PRO SINVBVS ET TANGENTIBVS.


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A. CZAJEWICZA

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o Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
0	0	0	100000.00	0	0
1	29.09	29.09	100000.00	6.4637261	6.4637261
2	58.18	58.18	100000.02	6.7647561	6.7647562
3	87.27	87.27	100000.04	6.9408473	6.9408475
4	116.36	116.36	100000.07	7.0657860	7.0657863
5	145.44	145.44	100000.11	7.1626960	7.1626964
6	174.53	174.53	100000.15	7.2418771	7.2418778
7	203.62	203.62	100000.21	7.3088239	7.3088248
8	232.71	232.71	100000.27	7.3668157	7.3668169
9	261.80	261.80	100000.34	7.4179681	7.4179696
10	290.89	290.89	100000.42	7.4637255	7.4637273
11	319.98	319.98	100000.51	7.5051181	7.5051203
12	349.07	349.07	100000.61	7.5429065	7.5429091
13	378.15	378.16	100000.72	7.5776684	7.5776715
14	407.24	407.25	100000.83	7.6098530	7.6098566
15	436.33	436.34	100000.95	7.6398160	7.6398201
16	465.42	465.43	100001.08	7.6678445	7.6678492
17	494.51	494.52	100001.22	7.6941733	7.6941786
18	523.60	523.61	100001.37	7.7189966	7.7190026
19	552.68	552.69	100001.53	7.7424775	7.7424841
20	581.77	581.78	100001.69	7.7647537	7.7647610
21	610.86	610.87	100001.87	7.7859427	7.7859508
22	639.95	639.96	100002.05	7.8061458	7.8061547
23	669.04	669.05	100002.24	7.8254507	7.8254604
24	698.13	698.14	100002.44	7.8439338	7.8439444
25	727.21	727.23	100002.64	7.8616623	7.8616738
26	756.30	756.32	100002.86	7.8786953	7.8787077
27	785.39	785.41	100003.08	7.8950854	7.8950988
28	814.48	814.50	100003.32	7.9108793	7.9108938
29	843.57	843.60	100003.56	7.9261190	7.9261344
30	872.65	872.69	100003.81	7.9408419	7.9408584

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89 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	100000.00	Infinit.	Infinit.	10.0000000	Infinit.
59	99999.99	343774667.	343774682.	9.9999999	13.5362739
58	99999.98	171887319.	171887348.	9.9999999	13.2352438
57	99999.96	114591530.	114591574.	9.9999998	13.0591525
56	99999.93	85943630.	85943689.	9.9999997	12.9342137
55	99999.89	68754887.	68754960.	9.9999995	12.8373036
54	99999.84	57295721.	57295809.	9.9999993	12.7581222
53	99999.79	49110600.	49110702.	9.9999991	12.6911752
52	99999.73	42971757.	42971873.	9.9999988	12.6331831
51	99999.66	38197099.	38197230.	9.9999985	12.5820304
50	99999.58	34377371.	34377516.	9.9999982	12.5362727
49	99999.49	31252137.	31252297.	9.9999978	12.4948797
48	99999.39	28647773.	28647948.	9.9999974	12.4570909
47	99999.28	26444080.	26444269.	9.9999969	12.4223285
46	99999.17	24555198.	24555402.	9.9999964	12.3901434
45	99999.05	22918166.	22918385.	9.9999959	12.3601799
44	99998.92	21485762.	21485995.	9.9999953	12.3321508
43	99998.78	20221875.	20222122.	9.9999947	12.3058214
42	99998.63	19098419.	19098680.	9.9999940	12.2809974
41	99998.47	18093220.	18093496.	9.9999934	12.2575159
40	99998.31	17188540.	17188831.	9.9999927	12.2352390
39	99998.13	16370019.	16370325.	9.9999919	12.2140492
38	99997.95	15625908.	15626228.	9.9999911	12.1938453
37	99997.76	14946502.	14946837.	9.9999903	12.1745396
36	99997.56	14323712.	14324061.	9.9999894	12.1560556
35	99997.36	13750745.	13751108.	9.9999885	12.1383262
34	99997.14	13221851.	13222229.	9.9999876	12.1212923
33	99996.92	12732134.	12732526.	9.9999866	12.1049012
32	99996.68	12277396.	12277803.	9.9999856	12.0891062
31	99996.44	11854018.	11854440.	9.9999845	12.0738656
30	99996.19	11458865.	11459301.	9.9999835	12.0591416

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o Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	872.65	872.69	100003.81	7.9408419	7.9408584
31	901.74	901.78	100004.07	7.9550819	7.9550996
32	930.83	930.87	100004.33	7.9688698	7.9688886
33	959.92	959.96	100004.61	7.9822334	7.9822534
34	989.00	989.05	100004.89	7.9951980	7.9952192
35	1018.09	1018.14	100005.18	8.0077867	8.0078092
36	1047.18	1047.24	100005.48	8.0200207	8.0200445
37	1076.27	1076.33	100005.79	8.0319195	8.0319446
38	1105.35	1105.42	100006.11	8.0435009	8.0435274
39	1134.44	1134.51	100006.44	8.0547814	8.0548094
40	1163.53	1163.61	100006.77	8.0657763	8.0658057
41	1192.61	1192.70	100007.11	8.0764997	8.0765306
42	1221.70	1221.79	100007.46	8.0869646	8.0869970
43	1250.79	1250.88	100007.82	8.0971832	8.0972172
44	1279.87	1279.98	100008.19	8.1071669	8.1072025
45	1308.96	1309.07	100008.57	8.1169262	8.1169634
46	1338.05	1338.17	100008.95	8.1264710	8.1265099
47	1367.13	1367.26	100009.35	8.1358104	8.1358510
48	1396.22	1396.35	100009.75	8.1449532	8.1449956
49	1425.30	1425.45	100010.16	8.1539075	8.1539516
50	1454.39	1454.54	100010.58	8.1626808	8.1627267
51	1483.48	1483.64	100011.01	8.1712804	8.1713282
52	1512.56	1512.73	100011.45	8.1797129	8.1797626
53	1541.65	1541.83	100011.89	8.1879848	8.1880364
54	1570.73	1570.93	100012.34	8.1961020	8.1961556
55	1599.82	1600.02	100012.80	8.2040703	8.2041259
56	1628.90	1629.12	100013.27	8.2118949	8.2119526
57	1657.99	1658.21	100013.75	8.2195811	8.2196408
58	1687.07	1687.31	100014.23	8.2271335	8.2271953
59	1716.16	1716.41	100014.73	8.2345568	8.2346208
60	1745.24	1745.51	100015.23	8.2418553	8.2419215

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89 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	99996.19	11458865.0	11459301.4	9.9999835	12.0591416
29	99995.93	11089205.1	11089656.0	9.9999823	12.0449004
28	99995.67	10742648.4	10743113.9	9.9999812	12.0311114
27	99995.39	10417094.5	10417574.5	9.9999800	12.0177466
26	99995.11	10110690.2	10111184.9	9.9999788	12.0047808
25	99994.82	9821794.3	9822303.3	9.9999775	11.9921908
24	99994.52	9548947.5	9549471.1	9.9999762	11.9799555
23	99994.21	9290848.7	9291386.9	9.9999748	11.9680554
22	99993.89	9046333.6	9046886.3	9.9999735	11.9564726
21	99993.56	8814357.2	8814924.4	9.9999721	11.9451906
20	99993.23	8593979.1	8594560.9	9.9999706	11.9341943
19	99992.89	8384350.7	8384947.0	9.9999691	11.9234694
18	99992.54	8184704.1	8185315.0	9.9999676	11.9130030
17	99992.18	7994343.0	7994968.4	9.9999660	11.9027828
16	99991.81	7812634.2	7813274.2	9.9999644	11.8927975
15	99991.43	7639000.9	7639655.4	9.9999628	11.8830366
14	99991.04	7472916.5	7473585.6	9.9999611	11.8734901
13	99990.65	7313899.1	7314582.7	9.9999594	11.8641490
12	99990.25	7161507.0	7162205.2	9.9999577	11.8550044
11	99989.84	7015334.6	7016047.4	9.9999559	11.8460484
10	99989.42	6875008.7	6875736.0	9.9999541	11.8372733
9	99988.99	6740185.4	6740927.2	9.9999522	11.8286718
8	99988.55	6610547.3	6611303.6	9.9999503	11.8202374
7	99988.11	6485800.8	6486571.6	9.9999484	11.8119636
6	99987.66	6365674.1	6366459.5	9.9999464	11.8038444
5	99987.20	6249915.4	6250715.3	9.9999444	11.7958741
4	99986.73	6138290.5	6139105.0	9.9999424	11.7880474
3	99986.25	6030582.0	6031411.0	9.9999403	11.7803592
2	99985.76	5926587.2	5927430.8	9.9999382	11.7728047
1	99985.27	5826117.4	5826975.5	9.9999360	11.7653792
0	99984.77	5728996.2	5729868.9	9.9999338	11.7580785

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1 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	1745.24	1745.51	100015.23	8.2418553	8.2419215
1	1774.32	1774.60	100015.74	8.2490332	8.2491015
2	1803.41	1803.70	100016.26	8.2560943	8.2561649
3	1832.49	1832.80	100016.79	8.2630424	8.2631153
4	1861.58	1861.90	100017.33	8.2698810	8.2699563
5	1890.66	1891.00	100017.88	8.2766136	8.2766912
6	1919.74	1920.10	100018.43	8.2832434	8.2833234
7	1948.83	1949.20	100019.00	8.2897734	8.2898559
8	1977.91	1978.30	100019.57	8.2962067	8.2962917
9	2006.99	2007.40	100020.15	8.3025460	8.3026335
10	2036.08	2036.50	100020.73	8.3087941	8.3088842
11	2065.16	2065.60	100021.33	8.3149536	8.3150462
12	2094.24	2094.70	100021.94	8.3210269	8.3211221
13	2123.32	2123.80	100022.55	8.3270163	8.3271143
14	2152.41	2152.91	100023.17	8.3329243	8.3330249
15	2181.49	2182.01	100023.80	8.3387529	8.3388563
16	2210.57	2211.11	100024.44	8.3445043	8.3446105
17	2239.65	2240.21	100025.09	8.3501805	8.3502895
18	2268.73	2269.32	100025.75	8.3557835	8.3558953
19	2297.81	2298.42	100026.41	8.3613150	8.3614297
20	2326.90	2327.53	100027.08	8.3667769	8.3668945
21	2355.98	2356.63	100027.76	8.3721710	8.3722915
22	2385.06	2385.74	100028.45	8.3774988	8.3776223
23	2414.14	2414.84	100029.15	8.3827620	8.3828886
24	2443.22	2443.95	100029.86	8.3879622	8.3880918
25	2472.30	2473.05	100030.58	8.3931008	8.3932336
26	2501.38	2502.16	100031.30	8.3981793	8.3983152
27	2530.46	2531.27	100032.03	8.4031990	8.4033381
28	2559.54	2560.38	100032.77	8.4081614	8.4083037
29	2588.62	2589.48	100033.52	8.4130676	8.4132132
30	2617.69	2618.59	100034.28	8.4179190	8.4180679

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88 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99984.77	5728996.16	5729868.85	9.9999338	11.7580785
59	99984.26	5635058.99	5635946.19	9.9999316	11.7508985
58	99983.74	5544151.69	5545053.45	9.9999294	11.7438351
57	99983.21	5456130.03	5457046.35	9.9999271	11.7368847
56	99982.67	5370858.75	5371789.62	9.9999247	11.7300437
55	99982.13	5288210.91	5289156.37	9.9999224	11.7233088
54	99981.57	5208067.26	5209027.22	9.9999200	11.7166766
53	99981.01	5130315.66	5131290.17	9.9999175	11.7101441
52	99980.44	5054850.59	5055839.65	9.9999150	11.7037083
51	99979.86	4981572.64	4982576.23	9.9999125	11.6973665
50	99979.27	4910388.09	4911406.20	9.9999100	11.6911158
49	99978.67	4841208.41	4842241.10	9.9999074	11.6849538
48	99978.07	4773950.14	4774997.38	9.9999047	11.6788779
47	99977.45	4708534.30	4709596.08	9.9999021	11.6728857
46	99976.83	4644886.20	4645962.53	9.9998994	11.6669751
45	99976.20	4582935.12	4584025.99	9.9998966	11.6611437
44	99975.56	4522614.09	4523719.49	9.9998939	11.6553895
43	99974.91	4463859.56	4464979.52	9.9998911	11.6497105
42	99974.25	4406611.32	4407745.83	9.9998882	11.6441047
41	99973.59	4350812.16	4351961.22	9.9998853	11.6385703
40	99972.92	4296407.73	4297571.34	9.9998824	11.6331055
39	99972.24	4243346.39	4244524.54	9.9998794	11.6277085
38	99971.56	4191578.99	4192771.68	9.9998764	11.6223777
37	99970.86	4141058.76	4142266.00	9.9998734	11.6171114
36	99970.14	4091741.16	4092962.99	9.9998703	11.6119082
35	99969.43	4043583.75	4044820.09	9.9998672	11.6067664
34	99968.71	3996546.05	3997796.94	9.9998641	11.6016848
33	99967.98	3950589.46	3951854.89	9.9998609	11.5966619
32	99967.24	3905677.11	3906957.09	9.9998577	11.5916963
31	99966.49	3861773.81	3863068.34	9.9998544	11.5867868
30	99965.73	3818845.93	3820155.00	9.9998512	11.5819321

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I Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	2617.69	2618.59	100034.28	8.4179190	8.4180679
31	2646.77	2647.70	100035.05	8.4227168	8.4228690
32	2675.85	2676.81	100035.82	8.4274621	8.4276176
33	2704.93	2705.92	100036.60	8.4321561	8.4323150
34	2734.01	2735.03	100037.39	8.4367999	8.4369622
35	2763.09	2764.14	100038.20	8.4413944	8.4415603
36	2792.16	2793.25	100039.00	8.4459409	8.4461103
37	2821.24	2822.36	100039.82	8.4504402	8.4506131
38	2850.32	2851.48	100040.65	8.4548934	8.4550699
39	2879.40	2880.59	100041.48	8.4593013	8.4594814
40	2908.47	2909.70	100042.32	8.4636649	8.4638486
41	2937.55	2938.82	100043.17	8.4679850	8.4681725
42	2966.62	2967.93	100044.03	8.4722626	8.4724538
43	2995.70	2997.05	100044.90	8.4764984	8.4766933
44	3024.78	3026.16	100045.78	8.4806932	8.4808920
45	3053.85	3055.28	100046.67	8.4848479	8.4850505
46	3082.93	3084.39	100047.56	8.4889632	8.4891696
47	3112.00	3113.51	100048.46	8.4930398	8.4932502
48	3141.08	3142.63	100049.37	8.4970784	8.4972928
49	3170.15	3171.74	100050.29	8.5010798	8.5012982
50	3199.22	3200.86	100051.22	8.5050447	8.5052671
51	3228.30	3229.98	100052.15	8.5089736	8.5092001
52	3257.37	3259.10	100053.09	8.5128673	8.5130978
53	3286.44	3288.22	100054.05	8.5167264	8.5169610
54	3315.52	3317.34	100055.01	8.5205514	8.5207902
55	3344.59	3346.46	100055.98	8.5243430	8.5245860
56	3373.66	3375.58	100056.96	8.5281017	8.5283490
57	3402.73	3404.71	100057.95	8.5318281	8.5320797
58	3431.81	3433.83	100058.94	8.5355228	8.5357787
59	3460.88	3462.95	100059.94	8.5391863	8.5394466
60	3489.95	3492.08	100060.95	8.5428192	8.5430838

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88 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	99965.73	3818845.93	3820155.00	9.9998512	11.5819321
29	99964.96	3776861.30	3778184.92	9.9998478	11.5771310
28	99964.19	3735789.17	3737127.34	9.9998445	11.5723824
27	99963.41	3695600.11	3696952.82	9.9998411	11.5676850
26	99962.62	3656265.92	3657633.19	9.9998376	11.5630378
25	99961.82	3617759.62	3619141.43	9.9998342	11.5584397
24	99961.01	3580055.33	3581451.68	9.9998306	11.5538897
23	99960.20	3543128.25	3544539.15	9.9998271	11.5493869
22	99959.36	3506954.58	3508380.03	9.9998235	11.5449301
21	99958.53	3471511.50	3472951.50	9.9998199	11.5405186
20	99957.69	3436777.09	3438231.63	9.9998162	11.5361514
19	99956.84	3402730.29	3404199.39	9.9998125	11.5318275
18	99955.99	3369350.89	3370834.53	9.9998088	11.5275462
17	99955.12	3336619.45	3338117.63	9.9998050	11.5233067
16	99954.24	3304517.27	3306030.00	9.9998012	11.5191080
15	99953.36	3273026.37	3274553.65	9.9997974	11.5149495
14	99952.47	3242129.46	3243671.29	9.9997935	11.5108304
13	99951.57	3211809.88	3213366.26	9.9997896	11.5067498
12	99950.66	3182051.60	3183622.52	9.9997856	11.5027072
11	99949.74	3152839.16	3154424.63	9.9997817	11.4987018
10	99948.81	3124157.67	3125757.70	9.9997776	11.4947329
9	99947.88	3095992.80	3097607.37	9.9997736	11.4907999
8	99946.93	3068330.70	3069959.82	9.9997695	11.4869022
7	99945.98	3041158.02	3042801.69	9.9997653	11.4830390
6	99945.03	3014461.89	3016120.10	9.9997612	11.4792098
5	99944.06	2988229.86	2989902.63	9.9997570	11.4754140
4	99943.08	2962449.95	2964137.29	9.9997527	11.4716510
3	99942.09	2937110.55	2938812.41	9.9997484	11.4679203
2	99941.09	2912200.47	2913916.88	9.9997441	11.4642213
1	99940.09	2887708.88	2889439.84	9.9997398	11.4605534
0	99939.08	2863625.33	2865370.83	9.9997354	11.4569162

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2 Grad.

Minut.	Sinus.	Tang.	Secant	Log. Sin.	Log. Tang.
0	3489.95	3492.08	100060.95	8.5428192	8.5430838
1	3519.02	3521.20	100061.97	8.5464218	8.5466909
2	3548.09	3550.33	100063.00	8.5499948	8.5502683
3	3577.16	3579.45	100064.04	8.5535386	8.5538166
4	3606.23	3608.58	100065.09	8.5570536	8.5573362
5	3635.30	3637.71	100066.15	8.5605404	8.5608276
6	3664.37	3666.83	100067.21	8.5639994	8.5642912
7	3693.44	3695.96	100068.28	8.5674310	8.5677275
8	3722.51	3725.09	100069.36	8.5708357	8.5711368
9	3751.58	3754.22	100070.45	8.5742139	8.5745197
10	3780.65	3783.35	100071.55	8.5775660	8.5778766
11	3809.71	3812.48	100072.65	8.5808923	8.5812077
12	3838.78	3841.61	100073.77	8.5841933	8.5845136
13	3867.85	3870.74	100074.89	8.5874694	8.5877945
14	3896.91	3899.88	100076.02	8.5907209	8.5910509
15	3925.98	3929.01	100077.16	8.5939483	8.5942832
16	3955.05	3958.14	100078.31	8.5971517	8.5974917
17	3984.11	3987.28	100079.47	8.6003317	8.6006767
18	4013.18	4016.41	100080.63	8.6034886	8.6038386
19	4042.24	4045.55	100081.80	8.6066226	8.6069777
20	4071.31	4074.69	100082.98	8.6097341	8.6100943
21	4100.37	4103.83	100084.17	8.6128235	8.6131889
22	4129.44	4132.96	100085.37	8.6158910	8.6162616
23	4158.50	4162.10	100086.58	8.6189369	8.6193127
24	4187.57	4191.24	100087.80	8.6219616	8.6223427
25	4216.63	4220.38	100089.02	8.6249653	8.6253518
26	4245.69	4249.52	100090.25	8.6279484	8.6283402
27	4274.75	4278.66	100091.49	8.6309111	8.6313083
28	4303.82	4307.81	100092.74	8.6338537	8.6342563
29	4332.88	4336.95	100094.00	8.6367764	8.6371845
30	4361.94	4366.09	100095.27	8.6396796	8.6400931

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87 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99939.08	2863625.33	2865370.83	9.9997354	11.4569162
59	99938.06	2839939.69	2841699.74	9.9997309	11.4533091
58	99937.03	2816642.18	2818416.78	9.9997265	11.4497317
57	99935.99	2793723.33	2795512.48	9.9997220	11.4461834
56	99934.95	2771173.99	2772977.69	9.9997174	11.4426638
55	99933.90	2748985.28	2750803.53	9.9997128	11.4391724
54	99932.84	2727148.61	2728981.41	9.9997082	11.4357088
53	99931.77	2705655.68	2707503.03	9.9997036	11.4322725
52	99930.69	2684498.43	2686360.33	9.9996989	11.4288632
51	99929.60	2663669.04	2665545.49	9.9996942	11.4254803
50	99928.51	2643159.96	2645050.99	9.9996894	11.4221234
49	99927.40	2622963.84	2624869.39	9.9996846	11.4187923
48	99926.29	2603073.58	2604993.68	9.9996798	11.4154864
47	99925.17	2583482.27	2585416.92	9.9996749	11.4122055
46	99924.04	2564183.23	2566132.43	9.9996700	11.4089491
45	99922.90	2545169.99	2547133.71	9.9996650	11.4057168
44	99921.75	2526436.15	2528414.45	9.9996601	11.4025083
43	99920.60	2507975.68	2509968.53	9.9996550	11.3993233
42	99919.44	2489782.62	2491790.02	9.9996500	11.3961614
41	99918.27	2471851.19	2473873.14	9.9996449	11.3930223
40	99917.09	2454175.78	2456212.28	9.9996398	11.3899057
39	99915.90	2436750.95	2438802.00	9.9996346	11.3868111
38	99914.70	2419571.40	2421637.00	9.9996294	11.3837384
37	99913.49	2402631.99	2404712.14	9.9996242	11.3806873
36	99912.28	2385927.72	2388022.42	9.9996189	11.3776573
35	99911.06	2369453.72	2371562.97	9.9996136	11.3746482
34	99909.83	2353205.25	2355329.05	9.9996082	11.3716598
33	99908.59	2337177.72	2339316.07	9.9996028	11.3686917
32	99907.34	2321366.65	2323519.55	9.9995974	11.3657437
31	99906.08	2305767.67	2307935.13	9.9995919	11.3628155
30	99904.82	2290376.55	2292558.56	9.9995865	11.3599069

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2 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	4361.94	4366.09	100095.27	8.6396796	8.6400931
31	4391.00	4395.24	100096.55	8.6425634	8.6429825
32	4420.06	4424.38	100097.83	8.6454282	8.6458528
33	4449.12	4453.53	100099.12	8.6482742	8.6487044
34	4478.18	4482.68	100100.42	8.6511016	8.6515375
35	4507.24	4511.83	100101.73	8.6539107	8.6543522
36	4536.30	4540.97	100103.05	8.6567017	8.6571490
37	4565.36	4570.12	100104.38	8.6594748	8.6599279
38	4594.42	4599.27	100105.71	8.6622303	8.6626891
39	4623.47	4628.42	100107.05	8.6649684	8.6654331
40	4652.53	4657.57	100108.40	8.6676893	8.6681598
41	4681.59	4686.73	100109.76	8.6703932	8.6708697
42	4710.65	4715.88	100111.13	8.6730804	8.6735628
43	4739.70	4745.03	100112.51	8.6757510	8.6762393
44	4768.76	4774.19	100113.90	8.6784052	8.6788996
45	4797.81	4803.34	100115.30	8.6810433	8.6815437
46	4826.87	4832.50	100116.70	8.6836654	8.6841719
47	4855.92	4861.66	100118.11	8.6862718	8.6867844
48	4884.98	4890.82	100119.53	8.6888625	8.6893813
49	4914.03	4919.97	100120.96	8.6914379	8.6919629
50	4943.08	4949.13	100122.40	8.6939980	8.6945292
51	4972.14	4978.29	100123.85	8.6965431	8.6970806
52	5001.19	5007.46	100125.30	8.6990734	8.6996172
53	5030.24	5036.62	100126.76	8.7015889	8.7021390
54	5059.29	5065.78	100128.23	8.7040899	8.7046465
55	5088.35	5094.95	100129.71	8.7065766	8.7071395
56	5117.40	5124.11	100131.20	8.7090490	8.7096185
57	5146.45	5153.28	100132.70	8.7115075	8.7120834
58	5175.50	5182.44	100134.20	8.7139520	8.7145345
59	5204.55	5211.61	100135.71	8.7163829	8.7169719
60	5233.60	5240.78	100137.23	8.7188002	8.7193958

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87 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	99904.82	2290376.55	2292558.56	9.9995865	11.3599069
29	99903.55	2275189.16	2277385.72	9.9995809	11.3570175
28	99902.27	2260201.48	2262412.59	9.9995753	11.3541472
27	99900.98	2245409.59	2247635.25	9.9995697	11.3512956
26	99899.68	2230809.67	2233049.89	9.9995641	11.3484625
25	99898.37	2216398.02	2218652.78	9.9995584	11.3456478
24	99897.06	2202171.00	2204440.32	9.9995527	11.3428510
23	99895.73	2188125.10	2190408.97	9.9995469	11.3400721
22	99894.40	2174256.87	2176555.29	9.9995411	11.3373109
21	99893.06	2160562.96	2162875.93	9.9995353	11.3345669
20	99891.71	2147040.10	2149367.63	9.9995295	11.3318402
19	99890.35	2133685.11	2136027.19	9.9995236	11.3291303
18	99888.99	2120494.88	2122851.51	9.9995176	11.3264372
17	99887.61	2107466.37	2109837.55	9.9995116	11.3237607
16	99886.23	2094596.63	2096982.36	9.9995056	11.3211004
15	99884.84	2081882.76	2084283.05	9.9994996	11.3184563
14	99883.44	2069321.96	2071736.70	9.9994935	11.3158281
13	99882.03	2056911.47	2059340.86	9.9994874	11.3132156
12	99880.61	2044648.61	2047092.55	9.9994812	11.3106187
11	99879.18	2032530.75	2034989.27	9.9994750	11.3080371
10	99877.75	2020555.35	2023028.40	9.9994688	11.3054708
9	99876.31	2008719.89	2011207.50	9.9994625	11.3029194
8	99874.86	1997021.95	1999524.11	9.9994562	11.3003828
7	99873.40	1985459.12	1987975.84	9.9994498	11.2978610
6	99871.93	1974029.10	1976560.36	9.9994435	11.2953535
5	99870.45	1962729.59	1965275.41	9.9994370	11.2928605
4	99868.97	1951558.37	1954118.74	9.9994306	11.2903815
3	99867.48	1940513.27	1943088.20	9.9994241	11.2879166
2	99865.98	1929592.17	1932181.50	9.9994176	11.2854655
1	99864.47	1918792.98	1921397.01	9.9994110	11.2830281
0	99862.95	1908113.67	1910732.26	9.9994044	11.2806042

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3 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	5233.60	5240.78	100137.23	8.7188002	8.7193958
1	5262.64	5269.95	100138.76	8.7212040	8.7218063
2	5291.69	5299.12	100140.30	8.7235946	8.7242035
3	5320.74	5328.29	100141.85	8.7259721	8.7265877
4	5349.79	5357.46	100143.41	8.7283366	8.7289589
5	5378.83	5386.63	100144.98	8.7306882	8.7313174
6	5407.88	5415.81	100146.55	8.7330272	8.7336631
7	5436.93	5444.98	100148.13	8.7353535	8.7359964
8	5465.97	5474.16	100149.72	8.7376675	8.7383172
9	5495.02	5503.33	100151.32	8.7399691	8.7406258
10	5524.06	5532.51	100152.93	8.7422586	8.7429222
11	5553.11	5561.69	100154.55	8.7445360	8.7452067
12	5582.15	5590.87	100156.17	8.7468015	8.7474792
13	5611.19	5620.05	100157.80	8.7490553	8.7497400
14	5640.24	5649.23	100159.44	8.7512973	8.7519892
15	5669.28	5678.41	100161.09	8.7535278	8.7542269
16	5698.32	5707.59	100162.75	8.7557469	8.7564531
17	5727.36	5736.78	100164.42	8.7579546	8.7586681
18	5756.40	5765.96	100166.10	8.7601512	8.7608719
19	5785.44	5795.15	100167.78	8.7623366	8.7630647
20	5814.48	5824.34	100169.47	8.7645111	8.7652465
21	5843.52	5853.52	100171.17	8.7666747	8.7674175
22	5872.56	5882.71	100172.88	8.7688275	8.7695777
23	5901.60	5911.90	100174.60	8.7709697	8.7717274
24	5930.64	5941.09	100176.33	8.7731014	8.7738665
25	5959.67	5970.29	100178.07	8.7752226	8.7759952
26	5988.71	5999.48	100179.81	8.7773334	8.7781136
27	6017.75	6028.67	100181.56	8.7794340	8.7802218
28	6046.78	6057.87	100183.32	8.7815244	8.7823199
29	6075.82	6087.06	100185.09	8.7836048	8.7844079
30	6104.85	6116.26	100186.87	8.7856753	8.7864861

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86 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99862.95	1908113.67	1910732.26	9.9994044	11.2806042
59	99861.42	1897552.26	1900185.40	9.9993978	11.2781937
58	99859.89	1887106.80	1889754.50	9.9993911	11.2757965
57	99858.35	1876775.39	1879437.65	9.9993844	11.2734123
56	99856.80	1866556.18	1869232.99	9.9993776	11.2710411
55	99855.24	1856447.34	1859138.71	9.9993708	11.2686826
54	99853.67	1846447.09	1849153.01	9.9993640	11.2663369
53	99852.09	1836553.70	1839274.17	9.9993572	11.2640036
52	99850.50	1826765.44	1829500.48	9.9993503	11.2616828
51	99848.91	1817080.67	1819830.26	9.9993433	11.2593742
50	99847.31	1807497.74	1810261.88	9.9993364	11.2570778
49	99845.70	1798015.05	1800793.75	9.9993293	11.2547933
48	99844.08	1788631.04	1791424.29	9.9993223	11.2525208
47	99842.45	1779344.17	1782151.98	9.9993152	11.2502600
46	99840.81	1770152.94	1772975.31	9.9993081	11.2480108
45	99839.16	1761055.88	1763892.80	9.9993009	11.2457731
44	99837.51	1752051.55	1754903.03	9.9992938	11.2435469
43	99835.85	1743138.54	1746004.57	9.9992865	11.2413319
42	99834.18	1734315.46	1737196.05	9.9992793	11.2391281
41	99832.50	1725580.95	1728476.10	9.9992720	11.2369353
40	99830.81	1716933.69	1719843.40	9.9992646	11.2347535
39	99829.11	1708372.38	1711296.64	9.9992572	11.2325825
38	99827.41	1699895.74	1702834.56	9.9992498	11.2304223
37	99825.70	1691502.51	1694455.89	9.9992424	11.2282726
36	99823.98	1683191.48	1686159.41	9.9992349	11.2261335
35	99822.25	1674961.44	1677943.92	9.9992274	11.2240048
34	99820.51	1666811.20	1669808.25	9.9992198	11.2218864
33	99818.77	1658739.62	1661751.22	9.9992122	11.2197782
32	99817.01	1650745.55	1653771.71	9.9992046	11.2176801
31	99815.25	1642827.89	1645868.61	9.9991969	11.2155921
30	99813.48	1634985.55	1638040.82	9.9991892	11.2135139

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Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
	3 Grad.				
30	6104.85	6116.26	100186.87	8.7856753	8.7864861
31	6133.89	6145.46	100188.66	8.7877359	8.7885544
32	6162.92	6174.66	100190.46	8.7897867	8.7906130
33	6191.96	6203.86	100192.26	8.7918278	8.7926620
34	6220.99	6233.06	100194.07	8.7938594	8.7947014
35	6250.02	6262.26	100195.89	8.7958814	8.7967313
36	6279.05	6291.47	100197.72	8.7978941	8.7987519
37	6308.08	6320.67	100199.56	8.7998974	8.8007632
38	6337.11	6349.88	100201.41	8.8018915	8.8027653
39	6366.14	6379.08	100203.26	8.8038764	8.8047583
40	6395.17	6408.29	100205.12	8.8058523	8.8067422
41	6424.20	6437.50	100206.99	8.8078192	8.8087172
42	6453.23	6466.71	100208.87	8.8097772	8.8106834
43	6482.26	6495.92	100210.76	8.8117264	8.8126407
44	6511.29	6525.13	100212.66	8.8136668	8.8145894
45	6540.31	6554.35	100214.57	8.8155985	8.8165294
46	6569.34	6583.56	100216.49	8.8175217	8.8184608
47	6598.36	6612.78	100218.41	8.8194363	8.8203838
48	6627.39	6641.99	100220.34	8.8213425	8.8222984
49	6656.41	6671.21	100222.28	8.8232404	8.8242046
50	6685.44	6700.43	100224.23	8.8251299	8.8261026
51	6714.46	6729.65	100226.19	8.8270112	8.8279924
52	6743.49	6758.87	100228.16	8.8288844	8.8298741
53	6772.51	6788.09	100230.13	8.8307495	8.8317478
54	6801.53	6817.32	100232.11	8.8326066	8.8336134
55	6830.55	6846.54	100234.10	8.8344557	8.8354712
56	6859.57	6875.77	100236.10	8.8362969	8.8373211
57	6888.59	6904.99	100238.11	8.8381304	8.8391633
58	6917.61	6934.22	100240.13	8.8399561	8.8409977
59	6946.63	6963.45	100242.16	8.8417741	8.8428245
60	6975.65	6992.68	100244.19	8.8435845	8.8446437

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Minut.	86 Grad.				
	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	99813.48	1634985.55	1638040.82	9.9991892	11.2135139
29	99811.70	1627217.44	1630287.28	9.9991815	11.2114450
28	99809.91	1619522.53	1622606.93	9.9991737	11.2093870
27	99808.11	1611899.79	1614998.74	9.9991659	11.2073380
26	99806.30	1604348.19	1607461.70	9.9991580	11.2052986
25	99804.49	1596866.74	1599994.81	9.9991501	11.2032687
24	99802.67	1589454.48	1592597.11	9.9991422	11.2012481
23	99800.84	1582110.45	1585267.64	9.9991342	11.1992368
22	99799.00	1574833.71	1578005.45	9.9991262	11.1972347
21	99797.15	1567623.33	1570809.63	9.9991182	11.1952417
20	99795.29	1560478.41	1563679.27	9.9991101	11.1932578
19	99793.43	1553398.06	1556613.48	9.9991020	11.1912828
18	99791.56	1546381.41	1549611.39	9.9990938	11.1893166
17	99789.68	1539427.60	1542672.15	9.9990856	11.1873593
16	99787.79	1532535.80	1535794.90	9.9990774	11.1854106
15	99785.89	1525705.17	1528978.83	9.9990691	11.1834706
14	99783.98	1518934.90	1522223.12	9.9990608	11.1815392
13	99782.06	1512224.20	1515526.98	9.9990525	11.1796162
12	99780.14	1505572.27	1508889.61	9.9990441	11.1777016
11	99778.21	1498978.36	1502310.26	9.9990357	11.1757954
10	99776.27	1492441.70	1495788.16	9.9990273	11.1738974
9	99774.32	1485961.55	1489322.58	9.9990188	11.1720076
8	99772.36	1479537.18	1482912.77	9.9990103	11.1701259
7	99770.39	1473167.87	1476558.02	9.9990017	11.1682522
6	99768.42	1466852.92	1470257.63	9.9989931	11.1663866
5	99766.44	1460591.63	1464010.90	9.9989845	11.1645288
4	99764.45	1454383.32	1457817.15	9.9989758	11.1626789
3	99762.45	1448227.32	1451676.71	9.9989671	11.1608367
2	99760.44	1442122.97	1445585.92	9.9989584	11.1590023
1	99758.42	1436069.61	1439547.13	9.9989496	11.1571755
0	99756.40	1430066.63	1433558.70	9.9989408	11.1553563

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4 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	6975.65	6992.68	100244.19	8.8435845	8.8446437
1	7004.66	7021.91	100246.23	8.8453874	8.8464554
2	7033.68	7051.15	100248.29	8.8471827	8.8482597
3	7062.70	7080.38	100250.34	8.8489707	8.8500566
4	7091.71	7109.61	100252.41	8.8507512	8.8518461
5	7120.73	7138.85	100254.49	8.8525245	8.8536283
6	7149.74	7168.09	100256.58	8.8542905	8.8554034
7	7178.76	7197.33	100258.67	8.8560493	8.8571713
8	7207.77	7226.57	100260.78	8.8578010	8.8589321
9	7236.78	7255.81	100262.89	8.8595457	8.8606859
10	7265.80	7285.05	100265.01	8.8612833	8.8624327
11	7294.81	7314.30	100267.14	8.8630139	8.8641725
12	7323.82	7343.54	100269.28	8.8647376	8.8659055
13	7352.83	7372.79	100271.43	8.8664545	8.8676317
14	7381.84	7402.03	100273.58	8.8681646	8.8693511
15	7410.85	7431.28	100275.74	8.8698680	8.8710638
16	7439.86	7460.53	100277.91	8.8715646	8.8727699
17	7468.87	7489.79	100280.09	8.8732546	8.8744694
18	7497.87	7519.04	100282.28	8.8749381	8.8761623
19	7526.88	7548.29	100284.48	8.8766150	8.8778487
20	7555.89	7577.55	100286.68	8.8782854	8.8795286
21	7584.89	7606.80	100288.89	8.8799493	8.8812022
22	7613.90	7636.06	100291.11	8.8816069	8.8828694
23	7642.90	7665.32	100293.36	8.8832581	8.8845303
24	7671.90	7694.58	100295.60	8.8849031	8.8861850
25	7700.91	7723.84	100297.85	8.8865418	8.8878334
26	7729.91	7753.11	100300.09	8.8881743	8.8894757
27	7758.91	7782.37	100302.36	8.8898007	8.8911119
28	7787.91	7811.64	100304.64	8.8914209	8.8927420
29	7816.91	7840.90	100306.93	8.8930351	8.8943660
30	7845.91	7870.17	100309.22	8.8946433	8.8959842

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85 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99756.40	1430066.63	1433558.70	9.9989408	11.1553563
59	99754.37	1424113.37	1427620.01	9.9989319	11.1535446
58	99752.33	1418209.24	1421730.45	9.9989230	11.1517403
57	99750.28	1412353.63	1415889.39	9.9989141	11.1499434
56	99748.22	1406545.93	1410096.25	9.9989052	11.1481539
55	99746.15	1400785.56	1404350.45	9.9988962	11.1463717
54	99744.07	1395071.94	1398651.39	9.9988871	11.1445966
53	99741.99	1389404.51	1392998.52	9.9988780	11.1428287
52	99739.90	1383782.70	1387391.28	9.9988689	11.1410679
51	99737.80	1378205.98	1381829.12	9.9988598	11.1393141
50	99735.69	1372673.79	1376311.49	9.9988506	11.1375673
49	99733.57	1367185.60	1370837.87	9.9988414	11.1358275
48	99731.44	1361740.89	1365407.72	9.9988321	11.1340945
47	99729.31	1356339.15	1360020.54	9.9988228	11.1323683
46	99727.17	1350979.86	1354675.82	9.9988135	11.1306489
45	99725.02	1345662.53	1349373.06	9.9988041	11.1289362
44	99722.86	1340386.67	1344111.76	9.9987947	11.1272301
43	99720.69	1335151.79	1338891.44	9.9987853	11.1255306
42	99718.51	1329957.41	1333711.63	9.9987758	11.1238377
41	99716.32	1324803.07	1328571.86	9.9987663	11.1221513
40	99714.13	1319688.30	1323471.65	9.9987567	11.1204714
39	99711.93	1314612.66	1318410.57	9.9987471	11.1187978
38	99709.72	1309575.68	1313388.16	9.9987375	11.1171306
37	99707.50	1304576.93	1308403.98	9.9987278	11.1154697
36	99705.27	1299615.98	1303457.60	9.9987181	11.1138150
35	99703.03	1294692.40	1298548.58	9.9987084	11.1121666
34	99700.79	1289805.77	1293676.51	9.9986986	11.1105243
33	99698.54	1284955.66	1288840.97	9.9986888	11.1088881
32	99696.28	1280141.68	1284041.55	9.9986790	11.1072580
31	99694.01	1275363.41	1279277.86	9.9986691	11.1056340
30	99691.73	1270620.47	1274549.48	9.9986591	11.1040158

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4 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	7845.91	7870.17	100309.22	8.8946433	8.8959842
31	7874.91	7899.44	100311.52	8.8962455	8.8975963
32	7903.91	7928.71	100313.83	8.8978418	8.8992026
33	7932.90	7957.98	100316.15	8.8994322	8.9008030
34	7961.90	7987.26	100318.47	8.9010168	8.9023977
35	7990.90	8016.53	100320.81	8.9025955	8.9039866
36	8019.89	8045.81	100323.15	8.9041685	8.9055697
37	8048.89	8075.09	100325.51	8.9057358	8.9071472
38	8077.88	8104.37	100327.86	8.9072975	8.9087190
39	8106.87	8133.65	100330.23	8.9088535	8.9102853
40	8135.87	8162.93	100332.61	8.9104039	8.9118460
41	8164.86	8192.21	100335.09	8.9119487	8.9134012
42	8193.85	8221.50	100337.40	8.9134881	8.9149509
43	8222.84	8250.78	100339.80	8.9150219	8.9164952
44	8251.83	8280.07	100342.21	8.9165504	8.9180340
45	8280.82	8309.36	100344.63	8.9180734	8.9195675
46	8309.81	8338.65	100347.06	8.9195911	8.9210957
47	8338.80	8367.94	100349.50	8.9211034	8.9226186
48	8367.78	8397.23	100351.95	8.9226105	8.9241363
49	8396.77	8426.53	100354.41	8.9241123	8.9256487
50	8425.76	8455.83	100356.87	8.9256089	8.9271560
51	8458.74	8485.12	100359.34	8.9271003	8.9286581
52	8483.73	8514.42	100361.82	8.9285866	8.9301552
53	8512.71	8543.72	100364.31	8.9300678	8.9316471
54	8541.69	8573.02	100366.81	8.9315439	8.9331340
55	8570.67	8602.33	100369.32	8.9330150	8.9346160
56	8599.66	8631.63	100371.84	8.9344811	8.9360929
57	8628.64	8660.94	100374.36	8.9359422	8.9375650
58	8657.62	8690.25	100376.89	8.9373983	8.9390321
59	8686.60	8719.56	100379.43	8.9388496	8.9404944
60	8715.57	8748.87	100381.98	8.9402960	8.9419518

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85 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	99691.73	1270620.47	1274549.48	9.9986591	11.1040158
29	99689.44	1265912.46	1269856.04	9.9986492	11.1024037
28	99687.15	1261239.00	1265197.15	9.9986392	11.1007974
27	99684.85	1256599.71	1260572.42	9.9986292	11.0991970
26	99682.54	1251994.20	1255981.48	9.9986191	11.0976023
25	99680.22	1247422.12	1251423.97	9.9986090	11.0960134
24	99677.89	1242883.10	1246899.52	9.9985988	11.0944303
23	99675.55	1238376.79	1242407.77	9.9985886	11.0928528
22	99673.20	1233902.82	1237948.37	9.9985784	11.0912810
21	99670.85	1229460.85	1233520.97	9.9985682	11.0897147
20	99668.49	1225050.55	1229125.23	9.9985579	11.0881540
19	99666.12	1220671.56	1224760.82	9.9985475	11.0865988
18	99663.74	1216323.56	1220427.39	9.9985372	11.0850491
17	99661.35	1212006.22	1216124.62	9.9985268	11.0835048
16	99658.95	1207719.22	1211852.18	9.9985163	11.0819660
15	99656.55	1203462.23	1207609.76	9.9985058	11.0804325
14	99654.14	1199234.95	1203397.05	9.9984953	11.0789043
13	99651.72	1195037.05	1199213.72	9.9984848	11.0773814
12	99649.29	1190868.24	1195050.48	9.9984742	11.0758637
11	99646.85	1186728.21	1190934.02	9.9984636	11.0743513
10	99644.40	1182616.67	1186837.05	9.9984529	11.0728440
9	99641.94	1178533.31	1182768.27	9.9984422	11.0713419
8	99639.48	1174477.86	1178727.39	9.9984315	11.0698448
7	99637.01	1170450.03	1174714.12	9.9984207	11.0683529
6	99634.53	1166449.53	1170728.19	9.9984099	11.0668660
5	99632.04	1162476.08	1166769.32	9.9983990	11.0653840
4	99629.54	1158529.42	1162837.23	9.9983881	11.0639071
3	99627.03	1154609.27	1158931.65	9.9983772	11.0624350
2	99624.52	1150715.36	1155052.31	9.9983663	11.0609679
1	99622.00	1146847.43	1151198.96	9.9983553	11.0595056
0	99619.47	1143005.23	1147371.32	9.9983442	11.0580482

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5 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
0	8715.57	8748.87	100381.98	8.9402960	8.9419518
1	8744.55	8778.18	100384.54	8.9417376	8.9434044
2	8773.53	8807.49	100387.11	8.9431743	8.9448523
3	8802.51	8836.81	100389.69	8.9446063	8.9462954
4	8831.48	8866.12	100392.28	8.9460335	8.9477338
5	8860.46	8895.44	100394.87	8.9474561	8.9491676
6	8889.43	8924.76	100397.47	8.9488739	8.9505967
7	8918.40	8954.08	100400.08	8.9502871	8.9520211
8	8947.38	8983.41	100402.70	8.9516957	8.9534410
9	8976.35	9012.73	100405.33	8.9530996	8.9548564
10	9005.32	9042.06	100407.97	8.9544991	8.9562672
11	9034.29	9071.38	100410.61	8.9558940	8.9576735
12	9063.26	9100.71	100413.26	8.9572843	8.9590754
13	9092.23	9130.04	100415.92	8.9586703	8.9604728
14	9121.19	9159.38	100418.59	8.9600517	8.9618659
15	9150.16	9188.71	100421.27	8.9614288	8.9632545
16	9179.13	9218.04	100423.96	8.9628014	8.9646388
17	9208.09	9247.38	100426.66	8.9641697	8.9660188
18	9237.06	9276.72	100429.37	8.9655337	8.9673944
19	9266.02	9306.06	100432.08	8.9668934	8.9687658
20	9294.99	9335.40	100434.80	8.9682487	8.9701330
21	9323.95	9364.74	100437.53	8.9695999	8.9714959
22	9352.91	9394.09	100440.28	8.9709468	8.9728547
23	9381.87	9423.44	100443.02	8.9722895	8.9742092
24	9410.83	9452.78	100445.78	8.9736280	8.9755597
25	9439.79	9482.13	100448.55	8.9749624	8.9769060
26	9468.75	9511.48	100451.33	8.9762926	8.9782483
27	9497.71	9540.84	100454.11	8.9776188	8.9795865
28	9526.66	9570.19	100456.90	8.9789408	8.9809206
29	9555.62	9599.55	100459.70	8.9802589	8.9822507
30	9584.58	9628.90	100462.51	8.9815729	8.9835769

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84 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	99619.47	1143005.23	1147371.32	9.9983442	11.0580482
59	99616.93	1139188.49	1143569.16	9.9983332	11.0565956
58	99614.38	1135396.96	1139792.20	9.9983220	11.0551477
57	99611.82	1131630.40	1136040.21	9.9983109	11.0537046
56	99609.26	1127888.55	1132312.93	9.9982997	11.0522662
55	99606.69	1124171.17	1128610.13	9.9982885	11.0508324
54	99604.11	1120478.03	1124931.56	9.9982772	11.0494033
53	99601.52	1116808.88	1121276.99	9.9982660	11.0479789
52	99598.92	1113163.50	1117646.17	9.9982546	11.0465590
51	99596.31	1109541.64	1114038.90	9.9982433	11.0451436
50	99593.70	1105943.10	1110454.92	9.9982318	11.0437328
49	99591.07	1102367.63	1106894.03	9.9982204	11.0423265
48	99588.44	1098815.01	1103355.99	9.9982089	11.0409246
47	99585.80	1095285.04	1099840.59	9.9981974	11.0395272
46	99583.15	1091777.49	1096347.61	9.9981859	11.0381341
45	99580.49	1088292.14	1092876.84	9.9981743	11.0367455
44	99577.82	1084828.80	1089428.07	9.9981629	11.0353612
43	99575.15	1081387.24	1086001.09	9.9981510	11.0339812
42	99572.47	1077967.27	1082595.69	9.9981393	11.0326056
41	99569.78	1074568.68	1079211.68	9.9981275	11.0312342
40	99567.08	1071191.26	1075848.84	9.9981158	11.0298670
39	99564.37	1067834.84	1072506.99	9.9981040	11.0285041
38	99561.65	1064499.19	1069185.92	9.9980921	11.0271453
37	99558.92	1061184.14	1065885.45	9.9980802	11.0257908
36	99556.19	1057889.50	1062605.38	9.9980683	11.0244403
35	99553.45	1054615.07	1059345.53	9.9980563	11.0230940
34	99550.70	1051360.67	1056105.70	9.9980443	11.0217517
33	99547.94	1048126.11	1052885.72	9.9980323	11.0204135
32	99545.17	1044911.22	1049685.41	9.9980202	11.0190794
31	99542.40	1041715.81	1046504.58	9.9980081	11.0177493
30	99539.62	1038539.71	1043343.05	9.9979960	11.0164231

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5 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	9584.58	9628.90	100462.51	8.9815729	8.9835769
31	9613.53	9658.26	100465.33	8.9828829	8.9848991
32	9642.48	9687.63	100468.16	8.9841889	8.9862173
33	9671.44	9716.99	100470.99	8.9854910	8.9875317
34	9700.39	9746.35	100473.83	8.9867891	8.9888421
35	9729.34	9775.72	100476.69	8.9880834	8.9901487
36	9758.29	9805.09	100479.54	8.9893737	8.9914514
37	9787.24	9834.46	100482.41	8.9906602	8.9927503
38	9816.19	9863.83	100485.30	8.9919429	8.9940454
39	9845.14	9893.20	100488.18	8.9932217	8.9953367
40	9874.08	9922.57	100491.08	8.9944968	8.9966243
41	9903.03	9951.95	100493.99	8.9957681	8.9979081
42	9931.97	9981.33	100496.90	8.9970356	8.9991883
43	9960.92	10010.71	100499.82	8.9982994	9.0004647
44	9989.86	10040.09	100502.75	8.9995595	9.0017375
45	10018.81	10069.47	100505.69	9.0008160	9.0030066
46	10047.75	10098.86	100508.64	9.0020687	9.0042721
47	10076.69	10128.24	100511.60	9.0033179	9.0055340
48	10105.63	10157.63	100514.57	9.0045634	9.0067924
49	10134.57	10187.02	100517.54	9.0058053	9.0080471
50	10163.51	10216.41	100520.52	9.0070436	9.0092984
51	10192.45	10245.80	100523.51	9.0082784	9.0105461
52	10221.38	10275.20	100526.51	9.0095096	9.0117903
53	10250.32	10304.60	100529.52	9.0107374	9.0130310
54	10279.25	10334.00	100532.54	9.0119616	9.0142682
55	10308.19	10363.40	100535.57	9.0131823	9.0155021
56	10337.12	10392.80	100538.60	9.0143996	9.0167325
57	10366.05	10422.20	100541.64	9.0156135	9.0179594
58	10394.99	10451.60	100544.69	9.0168239	9.0191831
59	10423.92	10481.01	100547.75	9.0180309	9.0204033
60	10452.85	10510.42	100550.82	9.0192346	9.0216202

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84 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	99539.62	1038539.71	1043343.05	9.9979960	11.0164231
29	99536.83	1035382.74	1040200.66	9.9979838	11.0151009
28	99534.03	1032244.73	1037077.23	9.9979716	11.0137827
27	99531.22	1029125.51	1033972.59	9.9979593	11.0124683
26	99528.40	1026024.90	1030886.56	9.9979470	11.0111579
25	99525.57	1022942.76	1027818.99	9.9979347	11.0098513
24	99522.74	1019878.90	1024769.71	9.9979223	11.0085486
23	99519.90	1016833.16	1021738.55	9.9979099	11.0072497
22	99517.05	1013805.39	1018725.36	9.9978975	11.0059546
21	99514.19	1010795.42	1015729.98	9.9978850	11.0046633
20	99511.32	1007803.11	1012752.24	9.9978725	11.0033757
19	99508.44	1004828.28	1009792.00	9.9978599	11.0020919
18	99505.55	1001870.80	1006849.09	9.9978473	11.0008117
17	99502.66	998930.50	1003923.38	9.9978347	10.9995353
16	99499.76	996007.24	1001014.70	9.9978220	10.9982625
15	99496.85	993100.88	998122.91	9.9978093	10.9969934
14	99493.93	990211.25	995247.87	9.9977966	10.9957279
13	99491.00	987338.23	992389.43	9.9977838	10.9944660
12	99488.06	984481.66	989547.44	9.9977710	10.9932076
11	99485.12	981641.40	986721.76	9.9977582	10.9919529
10	99482.17	978817.32	983912.27	9.9977453	10.9907016
9	99479.21	976009.27	981118.80	9.9977323	10.9894539
8	99476.24	973217.13	978341.24	9.9977194	10.9882097
7	99473.27	970440.75	975579.44	9.9977064	10.9869690
6	99470.27	967680.00	972833.27	9.9976933	10.9857318
5	99467.28	964934.75	970102.60	9.9976803	10.9844979
4	99464.28	962204.86	967387.30	9.9976672	10.9832675
3	99461.27	959490.22	964687.24	9.9976540	10.9820406
2	99458.25	956790.68	962002.29	9.9976408	10.9808169
1	99455.22	954106.13	959332.33	9.9976276	10.9795967
0	99452.18	951436.45	956677.22	9.9976143	10.9783798

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6 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	10452.85	10510.42	100550.82	9.0192346	9.0216202
1	10481.78	10539.83	100553.90	9.0204348	9.0228338
2	10510.70	10569.24	100556.99	9.0216318	9.0240441
3	10539.63	10598.66	100560.09	9.0228254	9.0252510
4	10568.56	10628.08	100563.20	9.0240157	9.0264548
5	10597.48	10657.50	100566.31	9.0252027	9.0276552
6	10626.41	10686.92	100569.43	9.0263865	9.0288524
7	10655.33	10716.34	100572.56	9.0275669	9.0300464
8	10684.25	10745.76	100575.70	9.0287442	9.0312373
9	10713.18	10775.19	100578.85	9.0299182	9.0324249
10	10742.10	10804.62	100582.01	9.0310890	9.0336093
11	10771.02	10834.05	100585.18	9.0322567	9.0347906
12	10799.94	10863.48	100588.35	9.0334212	9.0359688
13	10828.85	10892.91	100591.53	9.0345825	9.0371439
14	10857.77	10922.34	100594.72	9.0357407	9.0383159
15	10886.69	10951.78	100597.92	9.0368958	9.0394848
16	10915.60	10981.22	100601.13	9.0380477	9.0406506
17	10944.52	11010.66	100604.35	9.0391966	9.0418134
18	10973.43	11040.10	100607.57	9.0403424	9.0429731
19	11002.34	11069.54	100610.81	9.0414852	9.0441299
20	11031.26	11098.99	100614.05	9.0426249	9.0452836
21	11060.17	11128.44	100617.30	9.0437617	9.0464343
22	11089.08	11157.89	100620.56	9.0448954	9.0475821
23	11117.99	11187.34	100623.83	9.0460261	9.0487270
24	11146.89	11216.79	100627.11	9.0471538	9.0498689
25	11175.80	11246.25	100630.40	9.0482786	9.0510078
26	11204.71	11275.71	100633.70	9.0494005	9.0521439
27	11233.61	11305.17	100637.01	9.0505194	9.0532771
28	11262.52	11334.63	100640.32	9.0516354	9.0544074
29	11291.42	11364.09	100643.64	9.0527485	9.0555349
30	11320.32	11393.56	100646.97	9.0538588	9.0566595

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83 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99452.18	951436.45	956677.22	9.9976143	10.9783798
59	99449.14	948781.49	954036.86	9.9976011	10.9771662
58	99446.09	946141.16	951411.10	9.9975877	10.9759559
57	99443.03	943515.31	948799.84	9.9975743	10.9747490
56	99439.96	940903.84	946202.96	9.9975609	10.9735452
55	99436.88	938306.63	943620.33	9.9975475	10.9723448
54	99433.79	935723.55	941051.84	9.9975340	10.9711476
53	99430.69	933154.50	938497.38	9.9975205	10.9699536
52	99427.59	930599.36	935956.82	9.9975069	10.9687627
51	99424.48	928058.02	933430.06	9.9974933	10.9675751
50	99421.36	925530.35	930916.99	9.9974797	10.9663907
49	99418.23	923016.27	928417.49	9.9974660	10.9652094
48	99415.09	920515.64	925931.45	9.9974523	10.9640312
47	99411.94	918028.38	923458.77	9.9974386	10.9628561
46	99408.79	915554.36	920999.34	9.9974248	10.9616841
45	99405.63	913093.48	918553.05	9.9974110	10.9605152
44	99402.46	910645.64	916119.80	9.9973971	10.9593494
43	99399.28	908210.74	913699.49	9.9973833	10.9581866
42	99396.09	905788.67	911292.00	9.9973693	10.9570269
41	99392.89	903379.33	908897.25	9.9973554	10.9558701
40	99389.69	900982.61	906515.12	9.9973414	10.9547164
39	99386.48	898598.43	904145.53	9.9973273	10.9535657
38	99383.26	896226.68	901788.37	9.9973132	10.9524179
37	99380.03	893867.26	899443.54	9.9972991	10.9512730
36	99376.79	891520.09	897110.95	9.9972850	10.9501311
35	99373.54	889185.05	894790.51	9.9972708	10.9489922
34	99370.28	886862.06	892482.11	9.9972566	10.9478561
33	99367.02	884551.03	890185.67	9.9972423	10.9467229
32	99363.75	882251.86	887901.09	9.9972280	10.9455926
31	99360.47	879964.46	885628.28	9.9972137	10.9444651
30	99357.18	877688.74	883367.15	9.9971993	11.9433405

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6 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	11320.32	11393.56	100646.97	9.0538588	9.0566595
31	11349.22	11423.03	100650.31	9.0549661	9.0577813
32	11378.12	11452.50	100653.66	9.0560706	9.0589002
33	11407.02	11481.97	100657.02	9.0571723	9.0600164
34	11435.92	11511.44	100660.39	9.0582711	9.0611297
35	11464.82	11540.91	100663.77	9.0593671	9.0622403
36	11493.72	11570.39	100667.15	9.0604604	9.0633482
37	11522.61	11599.87	100670.54	9.0615509	9.0644533
38	11551.51	11629.36	100673.94	9.0626386	9.0655556
39	11580.40	11658.83	100677.35	9.0637235	9.0666553
40	11609.29	11688.31	100680.77	9.0648057	9.0677522
41	11638.18	11717.80	100684.20	9.0658852	9.0688465
42	11667.07	11747.29	100687.64	9.0669619	9.0699381
43	11695.96	11776.78	100691.08	9.0680360	9.0710270
44	11724.85	11806.28	100694.53	9.0691074	9.0721133
45	11753.74	11835.78	100697.99	9.0701761	9.0731969
46	11782.63	11865.28	100701.45	9.0712421	9.0742779
47	11811.51	11894.78	100704.94	9.0723055	9.0753563
48	11840.40	11924.28	100708.43	9.0733663	9.0764321
49	11869.28	11953.78	100711.93	9.0744244	9.0775053
50	11898.16	11983.28	100715.44	9.0754799	9.0785760
51	11927.04	12012.79	100718.96	9.0765329	9.0796441
52	11955.93	12042.30	100722.48	9.0775832	9.0807096
53	11984.81	12071.81	100726.01	9.0786310	9.0817726
54	12013.68	12101.32	100729.55	9.0796762	9.0828331
55	12042.56	12130.84	100733.10	9.0807189	9.0838911
56	12071.44	12160.36	100736.66	9.0817590	9.0849466
57	12100.31	12189.88	100740.23	9.0827966	9.0859996
58	12129.19	12219.40	100743.81	9.0838317	9.0870501
59	12158.06	12248.93	100747.40	9.0848643	9.0880981
60	12186.93	12278.46	100750.99	9.0858945	9.0891438

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83 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	99357.18	877688.74	883357.15	9.9971993	10.9433405
29	99353.88	875424.61	881117.61	9.9971849	10.9422187
28	99350.58	873171.98	878879.57	9.9971704	10.9410998
27	99347.27	870930.77	876652.95	9.9971559	10.9399836
26	99343.95	868700.88	874437.66	9.9971414	10.9388703
25	99340.62	866482.23	872233.61	9.9971268	10.9377597
24	99337.28	864274.75	870040.71	9.9971122	10.9366518
23	99333.93	862078.33	867858.89	9.9970976	10.9355467
22	99330.57	859892.90	865688.05	9.9970829	10.9344444
21	99327.20	857718.38	863528.12	9.9970682	10.9333447
20	99323.83	855554.68	861379.01	9.9970535	10.9322478
19	99320.45	853401.72	859240.65	9.9970387	10.9311535
18	99317.06	851259.43	857112.95	9.9970239	10.9300619
17	99313.67	849127.72	854995.84	9.9970090	10.9289730
16	99310.25	847006.51	852889.23	9.9969941	10.9278867
15	99306.84	844895.73	850793.04	9.9969792	10.9268031
14	99303.42	842795.31	848707.21	9.9969642	10.9257221
13	99299.99	840705.15	846631.65	9.9969492	10.9246437
12	99296.55	838625.19	844566.29	9.9969342	10.9235679
11	99293.10	836555.30	842511.05	9.9969191	10.9224947
10	99289.64	834495.57	840465.86	9.9969040	10.9214240
9	99286.17	832445.77	838430.65	9.9968888	10.9203559
8	99282.70	830405.86	836405.34	9.9968736	10.9192904
7	99279.22	828375.79	834389.86	9.9968584	10.9182274
6	99275.73	826355.47	832384.15	9.9968431	10.9171669
5	99272.23	824344.85	830388.12	9.9968278	10.9161089
4	99268.72	822343.84	828401.71	9.9968125	10.9150534
3	99265.21	820352.39	826424.85	9.9967971	10.9140004
2	99261.69	818370.41	824457.48	9.9967817	10.9129499
1	99258.16	816397.86	822499.52	9.9967662	10.9119019
0	99254.62	814434.64	820550.90	9.9967507	10.9108562

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7 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	12186.93	12278.46	100750.99	9.0858945	9.0891438
1	12215.81	12307.99	100754.59	9.0869221	9.0901869
2	12244.68	12337.52	100758.20	9.0879473	9.0912277
3	12273.55	12367.05	100761.82	9.0889700	9.0922660
4	12302.41	12396.58	100765.45	9.0899903	9.0933020
5	12331.28	12426.12	100769.09	9.0910082	9.0943355
6	12360.15	12455.66	100772.74	9.0920237	9.0953667
7	12389.01	12485.20	100776.39	9.0930367	9.0963955
8	12417.88	12514.74	100780.05	9.0940474	9.0974219
9	12446.74	12544.29	100783.72	9.0950556	9.0984460
10	12475.60	12573.84	100787.40	9.0960615	9.0994678
11	12504.46	12603.39	100791.09	9.0970651	9.1004872
12	12533.32	12632.94	100794.79	9.0980662	9.1015044
13	12562.18	12662.49	100798.50	9.0990651	9.1025192
14	12591.04	12692.05	100802.22	9.1000616	9.1035317
15	12619.90	12721.61	100805.95	9.1010558	9.1045420
16	12648.75	12751.17	100809.69	9.1020477	9.1055500
17	12677.61	12780.73	100813.43	9.1030373	9.1065557
18	12706.46	12810.29	100817.18	9.1040246	9.1075591
19	12735.31	12839.86	100820.94	9.1050096	9.1085604
20	12764.16	12869.43	100824.71	9.1059924	9.1095594
21	12793.01	12899.00	100828.49	9.1069729	9.1105562
22	12821.86	12928.57	100832.28	9.1079512	9.1115508
23	12850.71	12958.15	100836.07	9.1089272	9.1125431
24	12879.56	12987.73	100839.88	9.1099010	9.1135333
25	12908.41	13017.31	100843.70	9.1108726	9.1145213
26	12937.25	13046.89	100847.52	9.1118420	9.1155072
27	12966.09	13076.48	100851.35	9.1128092	9.1164909
28	12994.94	13106.07	100855.19	9.1137742	9.1174724
29	13023.78	13135.66	100859.04	9.1147370	9.1184518
30	13052.62	13165.25	100862.90	9.1156977	9.1194291

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82 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99254.62	814434.64	820550.90	9.9967507	10.9108562
59	99251.07	812480.71	818611.57	9.9967352	10.9098131
58	99247.51	810535.99	816681.45	9.9967196	10.9087723
57	99243.94	808600.42	814760.48	9.9967040	10.9077340
56	99240.36	806673.94	812848.60	9.9966884	10.9066980
55	99236.78	804756.47	810945.73	9.9966727	10.9056645
54	99233.19	802847.96	809051.82	9.9966570	10.9046333
53	99229.59	800948.35	807166.81	9.9966412	10.9036045
52	99225.98	799057.56	805290.62	9.9966254	10.9025781
51	99222.36	797175.55	803423.21	9.9966096	10.9015540
50	99218.74	795302.24	801564.50	9.9965937	10.9005322
49	99215.11	793437.58	799714.45	9.9965778	10.8995128
48	99211.47	791581.51	797872.98	9.9965619	10.8984956
47	99207.82	789733.96	796040.03	9.9965459	10.8974808
46	99204.16	787894.89	794215.56	9.9965299	10.8964683
45	99200.49	786064.23	792399.50	9.9965138	10.8954580
44	99196.81	784241.91	790591.79	9.9964977	10.8944500
43	99193.14	782427.90	788792.38	9.9964816	10.8934443
42	99189.44	780622.12	787001.20	9.9964655	10.8924409
41	99185.74	778824.53	785218.21	9.9964493	10.8914396
40	99182.03	777035.06	783443.35	9.9964330	10.8904406
39	99178.31	775253.66	781676.56	9.9964167	10.8894438
38	99174.59	773480.28	779917.78	9.9964004	10.8884492
37	99170.86	771714.86	778166.97	9.9963841	10.8874569
36	99167.12	769957.35	776424.06	9.9963677	10.8864667
35	99163.37	768207.69	774689.01	9.9963513	10.8854787
34	99159.61	766465.84	772961.76	9.9963348	10.8844928
33	99155.84	764731.74	771242.27	9.9963183	10.8835091
32	99152.06	763005.33	769530.47	9.9963018	10.8825276
31	99148.28	761286.57	767826.31	9.9962852	10.8815482
30	99144.49	759575.41	766129.76	9.9962686	10.8805709

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7 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	13052.62	13165.25	100862.90	9.1156977	9.1194291
31	13081.46	13194.84	100866.77	9.1166562	9.1204043
32	13110.30	13224.44	100870.64	9.1176125	9.1213773
33	13139.13	13254.04	100874.53	9.1185667	9.1223482
34	13167.97	13283.64	100878.42	9.1195188	9.1233171
35	13196.81	13313.24	100882.32	9.1204688	9.1242839
36	13225.64	13342.85	100886.23	9.1214167	9.1252486
37	13254.47	13372.46	100890.15	9.1223624	9.1262112
38	13283.30	13402.07	100894.08	9 1233061	9.1271718
39	13312.13	13431.68	100898.02	9.1242477	9.1281303
40	13340.96	13461.29	100901.97	9.1251872	9.1290868
41	13369.79	13490.91	100905.92	9.1261246	9.1300413
42	13398.62	13520.53	100909.88	9.1270600	9.1309937
43	13427.44	13550.15	100913.85	9.1279934	9.1319442
44	13456.27	13579.78	100917.83	9.1289247	9.1328926
45	13485.09	13609 40	100921.82	9.1298539	9.1338391
46	13513.92	13639.03	100925.82	9.1307812	9.1347835
47	13542.74	13668.66	100929.83	9.1317064	9.1357260
48	13571.56	13698.29	100933.85	9.1326297	9.1366665
49	13600.38	13727.93	100937.88	9.1335509	9.1376051
50	13629.19	13757.57	100941.92	9.1344702	9.1385417
51	13658 01	13787.21	100945.96	9.1353875	9.1394764
52	13686.83	13816.85	100950.01	9.1363028	9.1404092
53	13715.64	13846.50	100954.07	9.1372161	9.1413400
54	13744.45	13876.15	100958.14	9.1381275	9.1422689
55	13773.27	13905.80	100962.22	9.1390370	9.1431959
56	13802.08	13935.45	100966.31	9.1399445	9.1441210
57	13830.89	13965.10	100970.41	9.1408501	9.1450442
58	13859.70	13994.76	100974.52	9.1417537	9.1459655
59	13888.50	14024.42	100978.64	9.1426555	9.1468850
60	13917.31	14054.08	100982.76	9.1435553	9.1478025

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82 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	99144.49	759575.41	766129.76	9.9962686	10.8805709
29	99140.69	757871.79	764440.75	9.9962519	10.8795957
28	99136.88	756175.67	762759.23	9.9962352	10.8786227
27	99133.06	754486.99	761085.16	9.9962185	10.8776518
26	99129.23	752805.71	759418.49	9.9962017	10.8766829
25	99125.39	751131.78	757759.16	9.9961849	10.8757161
24	99121.55	749465.14	756107.13	9.9961681	10.8747514
23	99117.70	747805.76	754462.36	9.9961512	10.8737888
22	99113.84	746153.57	752824.78	9.9961343	10.8728282
21	99109.97	744508.55	751194.37	9.9961174	10.8718697
20	99106.09	742870.64	749571.06	9.9961004	10.8709132
19	99102.21	741239.78	747954.82	9.9960834	10.8699587
18	99098.32	739615.95	746345.60	9.9960663	10.8690063
17	99094.42	737999.09	744743.35	9.9960492	10.8680558
16	99090.51	736389.16	743148.03	9.9960321	10.8671074
15	99086.59	734786.10	741559.59	9.9960149	10.8661609
14	99082.66	733189.89	739977.98	9.9959977	10.8652165
13	99078.73	731600.47	738403.18	9.9959804	10.8642740
12	99074.78	730017.80	736835.12	9.9959631	10.8633335
11	99070.83	728441.84	735273.77	9.9959458	10.8623949
10	99066.87	726872.55	733719.09	9.9959284	10.8614583
9	99062.90	725309.87	732171.02	9.9959111	10.8605236
8	99058.92	723753.78	730629.54	9.9958936	10.8595908
7	99054.93	722204.22	729094.60	9.9958761	10.8586600
6	99050.94	720661.16	727566.16	9.9958586	10.8577311
5	99046.94	719124.56	726044.17	9.9958411	10.8568041
4	99042.93	717594.37	724528.59	9.9958235	10.8558790
3	99038.91	716070.56	723019.40	9.9958059	10.8549558
2	99034.88	714553.08	721516.53	9.9957882	10.8540345
1	99030.84	713041.90	720019.96	9.9957705	10.8531151
0	99026.80	711536.97	718529.65	9.9957528	10.8521975

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8 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	13917.31	14054.08	100982.76	9.1435553	9.1478025
1	13946.12	14083.75	100986.89	9.1444532	9.1487182
2	13974.92	14113.41	100991.03	9.1453493	9.1496321
3	14003.72	14143.08	100995.18	9.1462435	9.1505441
4	14032.52	14172.75	100999.34	9.1471358	9.1514543
5	14061.32	14202.43	101003.51	9.1480262	9.1523627
6	14090.12	14232.11	101007.69	9.1489148	9.1532692
7	14118.92	14261.79	101011.88	9.1498015	9.1541739
8	14147.72	14291.47	101016.07	9.1506864	9.1550769
9	14176.51	14321.15	101020.27	9.1515694	9.1559780
10	14205.31	14350.84	101024.48	9.1524507	9.1568773
11	14234.10	14380.53	101028.70	9.1533301	9.1577748
12	14262.89	14410.22	101032.93	9.1542076	9.1586706
13	14291.68	14439.91	101037.18	9.1550834	9.1595646
14	14320.47	14469.61	101041.42	9.1559574	9.1604569
15	14349.26	14499.31	101045.68	9.1568296	9.1613473
16	14378.05	14529.01	101049.95	9.1577000	9.1622361
17	14406.84	14558.71	101054.23	9.1585686	9.1631231
18	14435.62	14588.42	101058.51	9.1594354	9.1640083
19	14464.40	14618.13	101062.80	9.1603005	9.1648919
20	14493.19	14647.84	101067.10	9.1611639	9.1657737
21	14521.97	14677.55	101071.41	9.1620254	9.1666538
22	14550.75	14707.27	101075.73	9.1628853	9.1675322
23	14579.53	14736.99	101080.06	9.1637434	9.1684089
24	14608.30	14766.72	101084.40	9.1645998	9.1692839
25	14637.08	14796.44	101088.75	9.1654544	9.1701572
26	14665.85	14826.17	101093.11	9.1663074	9.1710289
27	14694.63	14855.90	101097.47	9.1671586	9.1718989
28	14723.40	14885.63	101101.84	9.1680081	9.1727672
29	14752.17	14915.36	101106.22	9.1688559	9.1736338
30	14780.94	14945.10	101110.61	9.1697021	9.1744988

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81 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	99026.80	711536.97	718529.65	9.9957528	10.8521975
59	99022.75	710038.26	717045.56	9.9957350	10.8512818
58	99018.69	708545.73	715567.64	9.9957172	10.8503679
57	99014.62	707059.34	714095.87	9.9956993	10.8494559
56	99010.54	705579.05	712630.19	9.9956815	10.8485457
55	99006.45	704104.82	711170.58	9.9956635	10.8476373
54	99002.36	702636.62	709717.00	9.9956456	10.8467308
53	98998.26	701174.41	708269.41	9.9956276	10.8458261
52	98994.15	699718.06	706827.77	9.9956095	10.8449231
51	98990.03	698267.81	705392.05	9.9955915	10.8440220
50	98985.90	696823.35	703962.20	9.9955734	10.8431227
49	98981.76	695384.73	702538.20	9.9955552	10.8422252
48	98977.62	693951.92	701120.01	9.9955370	10.8413294
47	98973.47	692524.89	699707.60	9.9955188	10.8404354
46	98969.31	691103.59	698300.92	9.9955005	10.8395431
45	98965.14	689687.99	696899.94	9.9954822	10.8386527
44	98960.96	688278.07	695504.64	9.9954639	10.8377639
43	98956.77	686873.78	694114.96	9.9954455	10.8368769
42	98952.57	685475.08	692730.89	9.9954271	10.8359917
41	98948.37	684081.96	691352.39	9.9954087	10.8351081
40	98944.16	682694.37	689979.42	9.9953902	10.8342263
39	98939.94	681312.27	688611.95	9.9953717	10.8333462
38	98935.71	679935.65	687249.95	9.9953531	10.8324678
37	98931.47	678564.46	685893.38	9.9953345	10.8315911
36	98927.23	677198.67	684542.22	9.9953159	10.8307161
35	98922.98	675838.26	683196.42	9.9952972	10.8298428
34	98918.72	674483.18	681855.97	9.9952785	10.8289711
33	98914.45	673133.41	680520.82	9.9952597	10.8281011
32	98910.17	671788.91	679190.95	9.9952409	10.8272328
31	98905.88	670449.66	677866.32	9.9952221	10.8263662
30	98901.59	669115.62	676546.91	9.9952033	10.8255012

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8 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	14780.94	14945.10	101110.61	9.1697021	9.1744988
31	14809.71	14974.84	101115.01	9.1705465	9.1753622
32	14838.48	15004.58	101119.42	9.1713893	9.1762239
33	14867.24	15034.33	101123.84	9.1722305	9.1770840
34	14896.01	15064.08	101128.27	9.1730699	9.1779425
35	14924.77	15093.83	101132.71	9.1739077	9.1787993
36	14953.53	15123.58	101137.15	9.1747439	9.1796546
37	14982.30	15153.33	101141.60	9.1755784	9.1805082
38	15011.06	15183.09	101146.06	9.1764112	9.1813602
39	15039.81	15212.85	101150.53	9.1772425	9.1822106
40	15068.57	15242.62	101155.01	9.1780721	9.1830595
41	15097.33	15272.38	101159.50	9.1789001	9.1839068
42	15126.08	15302.15	101164.00	9.1797265	9.1847525
43	15154.84	15331.92	101168.51	9.1805512	9.1855966
44	15183.59	15361.70	101173.03	9.1813744	9.1864392
45	15212.34	15391.47	101177.56	9.1821960	9.1872802
46	15241.09	15421.25	101182.09	9.1830160	9.1881196
47	15269.84	15451.03	101186.63	9.1838344	9.1889575
48	15298.58	15480.82	101191.18	9.1846512	9.1897939
49	15327.33	15510.61	101195.75	9.1854665	9.1906287
50	15356.07	15540.40	101200.31	9.1862802	9.1914621
51	15384.82	15570.19	101204.89	9.1870923	9.1922939
52	15413.56	15599.98	101209.48	9.1879029	9.1931241
53	15442.30	15629.78	101214.08	9.1887120	9.1939529
54	15471.04	15659.58	101218.69	9.1895195	9.1947802
55	15499.78	15689.38	101223.30	9.1903254	9.1956059
56	15528.51	15719.19	101227.93	9.1911299	9.1964302
57	15557.25	15749.00	101232.56	9.1919328	9.1972530
58	15585.98	15778.81	101237.20	9.1927342	9.1980743
59	15614.72	15808.62	101241.85	9.1935341	9.1988941
60	15643.45	15838.44	101246.51	9.1943324	9.1997125

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81 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	98901.59	669115.62	676546.91	9.9952033	10.8255012
29	98897.28	667786.77	675232.68	9.9951844	10.8246378
28	98892.97	666463.07	673923.60	9.9951654	10.8237761
27	98888.65	665144.49	672619.65	9.9951464	10.8229160
26	98884.32	663831.00	671320.79	9.9951274	10.8220575
25	98879.98	662522.58	670026.99	9.9951084	10.8212007
24	98875.63	661219.19	668738.22	9.9950893	10.8203454
23	98871.28	659920.80	667454.46	9.9950702	10.8194918
22	98866.92	658627.39	666175.68	9.9950510	10.8186398
21	98862.55	657338.92	664901.84	9.9950318	10.8177894
20	98858.17	656055.38	663632.93	9.9950126	10.8169405
19	98853.78	654776.72	662368.90	9.9949933	10.8160932
18	98849.39	653502.93	661109.73	9.9949740	10.8152475
17	98844.98	652233.96	659855.40	9.9949546	10.8144034
16	98840.57	650969.81	658605.87	9.9949352	10.8135608
15	98836.15	649710.43	657361.12	9.9949158	10.8127198
14	98831.72	648455.81	656121.13	9.9948964	10.8118804
13	98827.28	647205.91	654885.86	9.9948769	10.8110425
12	98822.83	645960.70	653655.28	9.9948573	10.8102061
11	98818.38	644720.17	652429.38	9.9948377	10.8093713
10	98813.92	643484.28	651208.12	9.9948181	10.8085379
9	98809.45	642253.01	649991.48	9.9947985	10.8077061
8	98804.97	641026.33	648779.44	9.9947788	10.8068759
7	98800.48	639804.22	647571.95	9.9947591	10.8060471
6	98795.98	638586.65	646369.01	9.9947393	10.8052198
5	98791.48	637373.59	645170.59	9.9947195	10.8043941
4	98786.97	636165.02	643976.66	9.9946997	10.8035698
3	98782.45	634960.92	642787.19	9.9946798	10.8027470
2	98777.92	633761.26	641602.16	9.9946599	10.8019257
1	98773.38	632566.01	640421.54	9.9946399	10.8011059
0	98768.83	631375.15	639245.32	9.9946199	10.8002875

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9 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	15643.45	15838.44	101246.51	9.1943324	9.1997125
1	15672.18	15868.26	101251.18	9.1951293	9.2005294
2	15700.91	15898.09	101255.86	9.1959247	9.2013449
3	15729.63	15927.91	101260.55	9.1967186	9.2021588
4	15758.36	15957.74	101265.25	9.1975110	9.2029714
5	15787.08	15987.57	101269.95	9.1983019	9.2037825
6	15815.81	16017.40	101274.67	9.1990913	9.2045922
7	15844.53	16047.24	101279.39	9.1998793	9.2054004
8	15873.25	16077.08	101284.12	9.2006658	9.2062072
9	15901.97	16106.92	101288.86	9.2014509	9.2070126
10	15930.69	16136.77	101293.61	9.2022345	9.2078165
11	15959.40	16166.62	101298.37	9.2030167	9.2086191
12	15988.12	16196.47	101303.14	9.2037974	9.2094203
13	16016.83	16226.32	101307.92	9.2045766	9.2102200
14	16045.55	16256.17	101312.71	9.2053545	9.2110184
15	16074.26	16286.03	101317.51	9.2061309	9.2118153
16	16102.97	16315.89	101322.31	9.2069059	9.2126109
17	16131.67	16345.76	101327.12	9.2076795	9.2134051
18	16160.38	16375.63	101331.94	9.2084516	9.2141980
19	16189.09	16405.50	101336.77	9.2092224	9.2149894
20	16217.79	16435.37	101341.61	9.2099917	9.2157795
21	16246.50	16465.25	101346.46	9.2107597	9.2165683
22	16275.20	16495.13	101351.32	9.2115263	9.2173556
23	16303.90	16525.01	101356.19	9.2122914	9.2181417
24	16332.60	16554.89	101361.07	9.2130552	9.2189264
25	16361.29	16584.78	101365.95	9.2138176	9.2197097
26	16389.99	16614.67	101370.84	9.2145787	9.2204917
27	16418.68	16644.56	101375.74	9.2153384	9.2212724
28	16447.38	16674.46	101380.65	9.2160967	9.2220518
29	16476.07	16704.36	101385.58	9.2168536	9.2228298
30	16504.76	16734.26	101390.50	9.2176092	9.2236065

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80 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	98768.83	631375.15	639245.32	9.9946199	10.8002875
59	98764.28	630188.66	638073.47	9.9945999	10.7994706
58	98759.72	629006.51	636905.95	9.9945798	10.7986551
57	98755.14	627828.68	635742.76	9.9945597	10.7978412
56	98750.57	626655.14	634583.86	9.9945396	10.7970286
55	98745.98	625485.88	633429.23	9.9945194	10.7962175
54	98741.38	624320.86	632278.84	9.9944992	10.7954078
53	98736.77	623160.07	631132.69	9.9944789	10.7945996
52	98732.16	622003.47	629990.73	9.9944587	10.7937928
51	98727.54	620851.06	628852.95	9.9944383	10.7929874
50	98722.91	619702.79	627719.33	9.9944180	10.7921835
49	98718.27	618558.67	626589.84	9.9943975	10.7913809
48	98713.62	617418.65	625464.46	9.9943771	10.7905797
47	98708.97	616282.72	624343.16	9.9943566	10.7897800
46	98704.31	615150.85	623225.94	9.9943361	10.7889816
45	98699.64	614023.03	622112.75	9.9943156	10.7881847
44	98694.96	612899.23	621003.59	9.9942950	10.7873891
43	98690.27	611779.43	619898.43	9.9942743	10.7865949
42	98685.57	610663.60	618797.25	9.9942537	10.7858020
41	98680.86	609551.74	617700.03	9.9942330	10.7850106
40	98676.15	608443.81	616606.74	9.9942122	10.7842205
39	98671.43	607339.79	615517.36	9.9941914	10.7834317
38	98666.70	606239.67	614431.89	9.9941706	10.7826444
37	98661.96	605143.43	613350.28	9.9941498	10.7818583
36	98657.21	604051.03	612272.53	9.9941289	10.7810736
35	98652.46	602962.47	611198.61	9.9941079	10.7802903
34	98647.70	601877.72	610128.50	9.9940870	10.7795083
33	98642.93	600796.76	609062.19	9.9940659	10.7787276
32	98638.15	599719.57	607999.64	9.9940449	10.7779482
31	98633.36	598646.14	606940.85	9.9940238	10.7771702
30	98628.56	597576.44	605885.80	9.9940027	10.7763935

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9 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	16504.76	16734.26	101390.50	9.2176092	9.2236065
31	16533.45	16764.16	101395.44	9.2183635	9.2243819
32	16562.14	16794.07	101400.39	9.2191164	9.2251561
33	16590.82	16823.98	101405.35	9.2198680	9.2259289
34	16619.51	16853.89	101410.32	9.2206182	9.2267004
35	16648.19	16883.81	101415.30	9.2213671	9.2274706
36	16676.87	16913.73	101420.29	9.2221147	9.2282395
37	16705.55	16943.65	101425.29	9.2228609	9.2290071
38	16734.23	16973.58	101430.29	9.2236059	9.2297735
39	16762.91	17003.51	101435.30	9.2243495	9.2305386
40	16791.59	17033.44	101440.32	9.2250918	9.2313024
41	16820.26	17063.37	101445.35	9.2258328	9.2320650
42	16848.94	17093.31	101450.39	9.2265725	9.2328262
43	16877.61	17123.25	101455.44	9.2273110	9.2335863
44	16906.28	17153.19	101460.50	9.2280481	9.2343451
45	16934.95	17183.14	101465.57	9.2287839	9.2351026
46	16963.62	17213.09	101470.64	9.2295185	9.2358589
47	16992.28	17243.04	101475.72	9.2302518	9.2366139
48	17020.95	17273.00	101480.81	9.2309838	9.2373678
49	17049.61	17302.96	101485.91	9.2317145	9.2381203
50	17078.28	17332.92	101491.02	9.2324440	9.2388717
51	17106.94	17362.88	101496.16	9.2331722	9.2396218
52	17135.60	17392.85	101501.29	9.2338992	9.2403708
53	17164.25	17422.82	101506.43	9.2346249	9.2411185
54	17192.91	17452.79	101511.58	9.2353494	9.2418650
55	17221.56	17482.77	101516.72	9.2360726	9.2426103
56	17250.22	17512.75	101521.89	9.2367946	9.2433543
57	17278.87	17542.73	101527.07	9.2375153	9.2440972
58	17307.52	17572.72	101532.26	9.2382349	9.2448389
59	17336.17	17602.71	101537.46	9.2389532	9.2455794
60	17364.82	17632.70	101542.66	9.2396702	9.2463188

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80 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	98628.56	597576.44	605885.80	9.9940027	10.7763935
29	98623.75	596510.45	604834.45	9.9939815	10.7756181
28	98618.94	595448.15	603786.80	9.9939603	10.7748439
27	98614.12	594389.52	602742.82	9.9939391	10.7740711
26	98609.29	593334.55	601702.50	9.9939178	10.7732996
25	98604.45	592283.22	600665.81	9.9938965	10.7725294
24	98599.60	591235.50	599632.74	9.9938752	10.7717605
23	98594.74	590191.38	598603.26	9.9938538	10.7709929
22	98589.88	589150.84	597577.37	9.9938324	10.7702265
21	98585.01	588113.86	596555.04	9.9938109	10.7694614
20	98580.13	587080.42	595536.25	9.9937894	10.7686976
19	98575.24	586050.51	594520.98	9.9937679	10.7679350
18	98570.34	585024.10	593506.22	9.9937463	10.7671738
17	98565.44	584001.17	592508.95	9.9937247	10.7664137
16	98560.53	582981.72	591496.14	9.9937030	10.7656549
15	98555.61	581965.72	590494.79	9.9936813	10.7648974
14	98550.68	580953.15	589496.88	9.9936596	10.7641411
13	98545.74	579944.00	588502.38	9.9936378	10.7633861
12	98540.79	578983.25	587511.28	9.9936160	10.7626322
11	98535.83	577935.88	586523.56	9.9935942	10.7618797
10	98530.87	576936.88	585539.20	9.9935723	10.7611283
9	98525.90	575941.22	584558.20	9.9935504	10.7603782
8	98520.92	574948.89	583580.53	9.9935285	10.7596292
7	98515.93	573959.88	582606.17	9.9935065	10.7588815
6	98510.93	572974.16	581635.10	9.9934844	10.7581350
5	98505.92	571991.73	580667.32	9.9934624	10.7573897
4	98500.91	571012.56	579702.80	9.9934403	10.7566457
3	98495.89	570036.63	578741.53	9.9934181	10.7559028
2	98490.86	569063.94	577783.50	9.9933959	10.7551611
1	98485.82	568094.46	576828.67	9.9933737	10.7544206
0	98480.77	567128.18	575877.05	9.9933515	10.7536812

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10 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	17364.82	17632.70	101542.66	9.2396702	9.2463188
1	17393.46	17662.69	101547.87	9.2403861	9.2470569
2	17422.11	17692.69	101553.10	9.2411007	9.2477939
3	17450.75	17722.69	101558.33	9.2418141	9.2485297
4	17479.39	17752.69	101563.57	9.2425264	9.2492643
5	17508.03	17782.70	101568.82	9.2432374	9.2499978
6	17536.67	17812.71	101574.08	9.2439472	9.2507301
7	17565.31	17842.73	101579.35	9.2446558	9.2514612
8	17593.95	17872.74	101584.63	9.2453632	9.2521912
9	17622.58	17902.76	101589.92	9.2460695	9.2529200
10	17651.21	17932.79	101595.21	9.2467746	9.2536477
11	17679.84	17962.81	101600.51	9.2474784	9.2543743
12	17708.47	17992.84	101605.82	9.2481811	9.2550997
13	17737.10	18022.87	101611.14	9.2488827	9.2558240
14	17765.73	18052.91	101616.47	9.2495830	9.2565472
15	17794.35	18082.95	101621.81	9.2502822	9.2572692
16	17822.98	18112.99	101627.16	9.2509803	9.2579901
17	17851.60	18143.03	101632.52	9.2516772	9.2587099
18	17880.22	18173.08	101637.89	9.2523729	9.2594285
19	17908.84	18203.13	101643.27	9.2530675	9.2601461
20	17937.46	18233.18	101648.66	9.2537609	9.2608625
21	17966.07	18263.24	101654.06	9.2544532	9.2615779
22	17994.69	18293.30	101659.46	9.2551444	9.2622921
23	18023.30	18323.36	101664.87	9.2558344	9.2630053
24	18051.91	18353.43	101670.29	9.2565233	9.2637173
25	18080.52	18383.50	101675.72	9.2572110	9.2644283
26	18109.13	18413.57	101681.16	9.2578977	9.2651382
27	18137.74	18443.65	101686.61	9.2585832	9.2658470
28	18166.35	18473.73	101692.07	9.2592676	9.2665547
29	18194.95	18503.81	101697.54	9.2599509	9.2672613
30	18223.55	18533.90	101703.02	9.2606330	9.2679669

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79 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	98480.77	567128.18	575877.05	9.9933515	10.7536812
59	98475.71	566165.09	574928.61	9.9933292	10.7529431
58	98470.65	565205.16	573983.33	9.9933068	10.7522061
57	98465.58	564248.38	573041.21	9.9932845	10.7514703
56	98460.50	563294.74	572102.23	9.9932621	10.7507357
55	98455.41	562344.21	571166.36	9.9932396	10.7500022
54	98450.31	561396.80	570233.60	9.9932171	10.7492699
53	98445.21	560452.47	569303.93	9.9931946	10.7485388
52	98440.10	559511.21	568377.34	9.9931720	10.7478088
51	98434.98	558573.02	567453.80	9.9931494	10.7470800
50	98429.85	557637.86	566533.31	9.9931268	10.7463523
49	98424.71	556705.74	565615.84	9.9931041	10.7456257
48	98419.56	555776.63	564701.40	9.9930814	10.7449003
47	98414.41	554850.52	563789.95	9.9930587	10.7441760
46	98409.24	553927.40	562881.48	9.9930359	10.7434528
45	98404.07	553007.24	561975.99	9.9930131	10.7427308
44	98398.89	552090.05	561073.45	9.9929902	10.7420099
43	98393.70	551175.79	560173.86	9.9929673	10.7412901
42	98388.50	550264.46	559277.19	9.9929444	10.7405715
41	98383.29	549356.04	558383.43	9.9929214	10.7398539
40	98378.08	548450.52	557492.58	9.9928984	10.7391375
39	98372.86	547547.88	556604.60	9.9928753	10.7384221
38	98367.63	546648.12	555719.50	9.9928522	10.7377079
37	98362.39	545751.21	554837.26	9.9928291	10.7369947
36	98357.14	544857.15	553957.86	9.9928059	10.7362827
35	98351.89	543965.92	553081.29	9.9927827	10.7355717
34	98346.63	543077.50	552207.54	9.9927595	10.7348618
33	98341.36	542191.88	551336.59	9.9927362	10 7341530
32	98336.08	541309.06	550468.43	9.9927129	10.7334453
31	98330.79	540429.01	549603.05	9.9926895	10.7327387
30	98325.49	539551.72	548740.43	9.9926661	10.7320331

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10 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	18223.55	18533.90	101703.03	9.2606330	9.2679669
31	18252.15	18563.99	101708.51	9.2613141	9.2686714
32	18280.75	18594.08	101714.01	9.2619941	9.2693749
33	18309.35	18624.18	101719.52	9.2626729	9.2700772
34	18337.95	18654.28	101725.04	9.2633507	9.2707786
35	18366.54	18684.38	101730.56	9.2640274	9.2714788
36	18395.14	18714.49	101736.09	9.2647030	9.2721780
37	18423.73	18744.60	101741.63	9.2653775	9.2728762
38	18452.32	18774.71	101747.18	9.2660509	9.2735733
39	18480.91	18804.83	101752.74	9.2667232	9.2742694
40	18509.49	18834.95	101758.31	9.2673945	9.2749644
41	18538.08	18865.07	101763.89	9.2680647	9.2756584
42	18566.66	18895.20	101769.48	9.2687338	9.2763514
43	18595.24	18925.33	101775.08	9.2694019	9.2770434
44	18623.82	18955.46	101780.69	9.2700689	9.2777343
45	18652.40	18985.59	101786.31	9.2707348	9.2784242
46	18680.98	19015.73	101791.94	9.2713997	9.2791131
47	18709.56	19045.87	101797.58	9.2720635	9.2798009
48	18738.13	19076.02	101803.22	9.2727263	9.2804878
49	18766.70	19106.17	101808.87	9.2733880	9.2811736
50	18795.27	19136.32	101814.53	9.2740487	9.2818585
51	18823.84	19166.48	101820.20	9.2747083	9.2825423
52	18852.41	19196.64	101825.88	9.2753669	9.2832251
53	18880.98	19226.80	101831.57	9.2760245	9.2839070
54	18909.54	19256.96	101837.27	9.2766811	9.2845878
55	18938.11	19287.13	101842.98	9.2773366	9.2852677
56	18966.67	19317.30	101848.70	9.2779911	9.2859466
57	18995.23	19347.48	101854.43	9.2786445	9.2866245
58	19023.79	19377.66	101860.17	9.2792970	9.2873014
59	19052.34	19407.84	101865.91	9.2799484	9.2879773
60	19080.90	19438.03	101871.68	9.2805988	9.2886523

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79 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	98325.49	539551.72	548740.43	9.9926661	10.7320331
29	98320.18	538677.18	547880.55	9.9926427	10.7313286
28	98314.87	537805.38	547023.42	9.9926192	10.7306251
27	98309.55	536936.30	546169.01	9.9925957	10.7299228
26	98304.22	536069.93	545317.31	9.9925722	10.7292214
25	98298.88	535206.26	544468.31	9.9925486	10.7285212
24	98293.53	534345.27	543621.99	9.9925250	10.7278220
23	98288.17	533486.96	542778.35	9.9925013	10.7271238
22	98282.82	532631.31	541937.37	9.9924776	10.7264267
21	98277.44	531778.30	541099.03	9.9924539	10.7257306
20	98272.06	530927.93	540263.33	9.9924301	10.7250356
19	98266.67	530080.18	539430.26	9.9924063	10.7243416
18	98261.27	529235.05	538599.79	9.9923824	10.7236486
17	98255.87	528392.51	537771.92	9.9923585	10.7229566
16	98250.46	527552.55	536946.64	9.9923346	10.7222657
15	98245.04	526715.17	536123.93	9.9923106	10.7215758
14	98239.61	525880.35	535303.79	9.9922866	10.7208869
13	98234.17	525048.09	534486.20	9.9922626	10.7201991
12	98228.72	524218.36	533671.14	9.9922385	10.7195122
11	98223.27	523391.16	532858.61	9.9922144	10.7188264
10	98217.81	522566.47	532048.60	9.9921902	10.7181415
9	98212.34	521744.28	531241.09	9.9921660	10.7174577
8	98206.86	520924.59	530436.08	9.9921418	10.7167749
7	98201.37	520107.38	529633.54	9.9921175	10.7160930
6	98195.87	519292.64	528833.47	9.9920932	10.7154122
5	98190.36	518480.35	528035.87	9.9920689	10.7147323
4	98184.85	517670.51	527240.70	9.9920445	10.7140534
3	98179.33	516863.11	526447.98	9.9920201	10.7133755
2	98173.80	516058.13	525657.68	9.9919956	10.7126986
1	98168.26	515255.57	524869.79	9.9919711	10.7120227
0	98162.71	514455.40	524084.31	9.9919466	10.7113477

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II Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	19080.90	19438.03	101871.68	9.2805988	9.2886523
1	19109.45	19468.22	101877.44	9.2812483	9.2893263
2	19138.00	19498.41	101883.21	9.2818967	9.2899993
3	19166.55	19528.61	101888.99	9.2825441	9.2906713
4	19195.10	19558.81	101894.78	9.2831905	9.2913424
5	19223.65	19589.01	101900.59	9.2838359	9.2920126
6	19252.20	19619.22	101906.39	9.2844803	9.2926817
7	19280.74	19649.43	101912.21	9.2851237	9.2933500
8	19309.28	19679.64	101918.04	9.2857661	9.2940172
9	19337.82	19709.86	101923.88	9.2864076	9.2946836
10	19366.36	19740.08	101929.73	9.2870480	9.2953489
11	19394.90	19770.30	101935.59	9.2876875	9.2960134
12	19423.44	19800.53	101941.46	9.2883260	9.2966769
13	19451.97	19830.76	101947.34	9.2889636	9.2973395
14	19480.50	19861.00	101953.23	9.2896001	9.2980011
15	19509.03	19891.24	101959.12	9.2902357	9.2986618
16	19537.56	19921.48	101965.02	9.2908704	9.2993216
17	19566.09	19951.72	101970.93	9.2915040	9.2999804
18	19594.61	19981.97	101976.85	9.2921367	9.3006383
19	19623.14	20012.22	101982.78	9.2927685	9.3012954
20	19651.66	20042.48	101988.72	9.2933993	9.3019514
21	19680.18	20072.74	101994.67	9.2940291	9.3026066
22	19708.70	20103.00	102000.64	9.2946580	9.3032609
23	19737.22	20133.27	102006.60	9.2952859	9.3039143
24	19765.73	20163.54	102012.58	9.2959129	9.3045667
25	19794.25	20193.81	102018.57	9.2965390	9.3052183
26	19822.76	20224.09	102024.57	9.2971641	9.3058689
27	19851.27	20254.37	102030.58	9.2977883	9.3065187
28	19879.78	20284.65	102036.60	9.2984116	9.3071675
29	19908.29	20314.94	102042.63	9.2990339	9.3078155
30	19936.79	20345.23	102048.67	9.2996553	9.3084626

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78 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	98162.71	514455.40	524084.31	9.9919466	10.7113477
59	98157.16	513657.63	523301.21	9.9919220	10.7106737
58	98151.60	512862.24	522520.50	9.9918974	10.7100007
57	98146.03	512069.21	521742.16	9.9918727	10.7093287
56	98140.45	511278.55	520966.18	9.9918480	10.7086576
55	98134.86	510490.24	520192.54	9.9918233	10.7079874
54	98129.26	509704.26	519421.25	9.9917986	10.7073183
53	98123.66	508920.61	518652.28	9.9917737	10.7066500
52	98118.05	508139.28	517885.63	9.9917489	10.7059828
51	98112.43	507360.25	517121.28	9.9917240	10.7053164
50	98106.80	506583.52	516359.24	9.9916991	10.7046511
49	98101.16	505809.07	515599.48	9.9916741	10.7039866
48	98095.51	505036.90	514841.99	9.9916492	10.7033231
47	98089.86	504267.00	514086.77	9.9916241	10.7026605
46	98084.20	503499.35	513333.81	9.9915990	10.7019989
45	98078.53	502733.95	512583.09	9.9915739	10.7013382
44	98072.85	501970.78	511834.61	9.9915488	10.7006784
43	98067.16	501209.84	511088.35	9.9915236	10.7000196
42	98061.46	500451.11	510344.31	9.9914984	10.6993617
41	98055.76	499694.59	509602.48	9.9914731	10.6987046
40	98050.05	498940.27	508862.84	9.9914478	10.6980486
39	98044.33	498188.13	508125.39	9.9914225	10.6973934
38	98038.60	497438.17	507390.12	9.9913971	10.6967391
37	98032.86	496690.37	506657.01	9.9913717	10.6960857
36	98027.11	495944.74	505926.06	9.9913462	10.6954333
35	98021.36	495201.25	505197.26	9.9913207	10.6947817
34	98015.60	494459.90	504470.60	9.9912952	10.6941311
33	98009.83	493720.68	503746.07	9.9912696	10.6934813
32	98004.05	492983.58	503023.67	9.9912440	10.6928325
31	97998.26	492248.59	502303.37	9.9912184	10.6921845
30	97992.47	491515.70	501585.17	9.9911927	10.6915374

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Minut.	II Grad.				
	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	19936.79	20345.23	102048.67	9.2996553	9.3084626
31	19965.30	20375.52	102054.70	9.3002758	9.3091088
32	19993.80	20405.82	102060.76	9.3008953	9.3097541
33	20022.30	20436.12	102066.82	9.3015140	9.3103985
34	20050.80	20466.43	102072.89	9.3021317	9.3110421
35	20079.30	20496.74	102078.97	9.3027485	9.3116848
36	20107.79	20527.05	102085.06	9.3033644	9.3123266
37	20136.29	20557.37	102091.16	9.3039794	9.3129675
38	20164.78	20587.69	102097.27	9.3045934	9.3136076
39	20193.27	20618.01	102103.39	9.3052066	9.3142468
40	20221.76	20648.34	102109.52	9.3058189	9.3148851
41	20250.24	20678.67	102115.66	9.3064303	9.3155226
42	20278.73	20709.00	102121.81	9.3070407	9.3161592
43	20307.21	20739.34	102127.97	9.3076503	9.3167950
44	20335.69	20769.68	102134.14	9.3082590	9.3174299
45	20364.17	20800.03	102140.32	9.3088668	9.3180640
46	20392.65	20830.38	102146.50	9.3094737	9.3186972
47	20421.13	20860.73	102152.69	9.3100798	9.3193295
48	20449.61	20891.09	102158.89	9.3106849	9.3199611
49	20478.08	20921.45	102165.10	9.3112892	9.3205918
50	20506.55	20951.81	102171.32	9.3118926	9.3212216
51	20535.02	20982.18	102177.55	9.3124951	9.3218506
52	20563.49	21012.55	102183.79	9.3130968	9.3224788
53	20591.95	21042.93	102190.04	9.3136976	9.3231061
54	20620.42	21073.31	102196.30	9.3142975	9.3237327
55	20648.88	21103.69	102202.57	9.3148965	9.3243584
56	20677.34	21134.07	102208.85	9.3154947	9.3249832
57	20705.80	21164.46	102215.14	9.3160921	9.3256073
58	20734.26	21194.86	102221.44	9.3166885	9.3262305
59	20762.72	21225.25	102227.75	9.3172841	9.3268529
60	20791.17	21255.65	102234.06	9.3178789	9.3274745

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78 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	97992.47	491515.70	501585.17	9.9911927	10.6915374
29	97986.67	490784.91	500869.07	9.9911670	10.6908912
28	97980.86	490056.20	500155.05	9.9911412	10.6902459
27	97975.04	489329.56	499443.11	9.9911154	10.6896015
26	97969.21	488604.99	498733.23	9.9910896	10.6889579
25	97963.37	487882.48	498025.41	9.9910637	10.6883152
24	97957.52	487162.01	497319.64	9.9910378	10.6876734
23	97951.67	486443.59	496615.91	9.9910119	10.6870325
22	97945.81	485727.19	495914.21	9.9909859	10.6863924
21	97939.94	485012.82	495214.53	9.9909598	10.6857532
20	97934.06	484300.45	494516.87	9.9909338	10.6851149
19	97928.18	483590.10	493821.20	9.9909077	10.6844774
18	97922.28	482881.74	493127.54	9.9908815	10.6838408
17	97916.38	482175.36	492435.86	9.9908553	10.6832050
16	97910.47	481470.96	491746.16	9.9908291	10.6825701
15	97904.55	480768.54	491058.44	9.9908029	10.6819360
14	97898.62	480068.08	490372.67	9.9907766	10.6813028
13	97892.68	479369.57	489688.86	9.9907502	10.6806705
12	97886.74	478673.00	489007.00	9.9907239	10.6800389
11	97880.79	477978.37	488327.07	9.9906974	10.6794082
10	97874.83	477285.67	487649.07	9.9906710	10.6787784
9	97868.86	476594.90	486972.99	9.9906445	10.6781494
8	97862.88	475906.03	486298.83	9.9906180	10.6775212
7	97856.89	475219.07	485626.57	9.9905914	10.6768939
6	97850.90	474534.01	484956.21	9.9905648	10.6762673
5	97844.90	473850.83	484287.74	9.9905382	10.6756416
4	97838.89	473169.54	483621.14	9.9905115	10.6750168
3	97832.87	472490.12	482956.43	9.9904848	10.6743927
2	97826.84	471812.56	482293.57	9.9904580	10.6737695
1	97820.80	471136.86	481632.58	9.9904312	10.6731471
0	97814.76	470463.01	480973.43	9.9904044	10.6725255

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12 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	20791.17	21255.66	102234.06	9.3178789	9.3274745
1	20819.62	21286.06	102240.40	9.3184728	9.3280953
2	20848.07	21316.47	102246.72	9.3190659	9.3287153
3	20876.52	21346.88	102253.07	9.3196581	9.3293345
4	20904.97	21377.30	102259.42	9.3202495	9.3299528
5	20933.41	21407.72	102265.78	9.3208400	9.3305704
6	20961.86	21438.14	102272.16	9.3214297	9.3311872
7	20990.30	21468.57	102278.53	9.3220186	9.3318031
8	21018.74	21499.00	102284.92	9.3226066	9.3324183
9	21047.18	21529.44	102291.32	9.3231938	9.3330327
10	21075.61	21559.88	102297.74	9.3237802	9.3336463
11	21104.05	21590.32	102304.15	9.3243657	9.3342591
12	21132.48	21620.77	102310.58	9.3249505	9.3348711
13	21160.91	21651.22	102317.02	9.3255344	9.3354823
14	21189.34	21681.67	102323.47	9.3261174	9.3360927
15	21217.77	21712.13	102329.93	9.3266997	9.3367024
16	21246.19	21742.59	102336.40	9.3272811	9.3373113
17	21274.62	21773.06	102342.88	9.3278617	9.3379194
18	21303.04	21803.53	102349.37	9.3284416	9.3385267
19	21331.46	21834.00	102355.87	9.3290206	9.3391333
20	21359.88	21864.48	102362.37	9.3295988	9.3397391
21	21388.29	21894.96	102368.90	9.3301761	9.3403441
22	21416.71	21925.44	102375.41	9.3307527	9.3409484
23	21445.12	21955.93	102381.96	9.3313285	9.3415519
24	21473.53	21986.42	102388.50	9.3319035	9.3421546
25	21501.94	22016.92	102395.04	9.3324777	9.3427566
26	21530.35	22074.42	102401.61	9.3330511	9.3433578
27	21558.76	22077.93	102408.18	9.3336237	9.3439583
28	21587.16	22108.44	102414.76	9.3341955	9.3445580
29	21615.56	22138.95	102421.35	9.3347665	9.3451570
30	21643.96	22169.47	102427.95	9.3353368	9.3457552

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77 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	97814.76	470463.01	480973.43	9.9904044	10.6725255
59	97808.71	469791.00	480316.13	9.9903775	10.6719047
58	97802.65	469120.83	479660.66	9.9903506	10.6712847
57	97796.58	468452.48	479007.02	9.9903237	10.6706655
56	97790.50	467785.95	478355.20	9.9902967	10.6700472
55	97784.41	467121.24	477705.19	9.9902697	10.6694296
54	97778.32	466458.32	477056.99	9.9902426	10.6688128
53	97772.22	465797.21	476410.58	9.9902155	10.6681969
52	97766.11	465137.88	475765.96	9.9901883	10.6675817
51	97759.99	464480.34	475123.12	9.9901612	10.6669673
50	97753.86	463824.57	474482.06	9.9901339	10.6663537
49	97747.73	463170.56	473842.77	9.9901067	10.6657409
48	97741.59	462518.32	473205.24	9.9900794	10.6651289
47	97735.44	461867.83	472569.45	9.9900521	10.6645177
46	97729.28	461219.08	471935.42	9.9900247	10.6639073
45	97723.11	460572.07	471303.13	9.9899973	10.6632976
44	97716.93	459926.80	470672.56	9.9899698	10.6626887
43	97710.75	459283.25	470043.72	9.9899423	10.6620806
42	97704.56	458641.41	469416.60	9.9899148	10.6614733
41	97698.36	458001.29	468791.19	9.9898873	10.6608667
40	97692.15	457362.87	468167.48	9.9898597	10.6602609
39	97685.93	456726.14	467545.48	9.9898320	10.6596559
38	97679.70	456091.11	466925.16	9.9898043	10.6590516
37	97673.47	455457.76	466306.52	9.9897766	10.6584481
36	97667.23	454826.08	465689.56	9.9897489	10.6578454
35	97660.98	454196.08	465074.27	9.9897211	10.6572434
34	97654.72	453567.73	464460.64	9.9896932	10.6566422
33	97648.45	452941.05	463848.67	9.9896654	10.6560417
32	97642.18	452316.01	463238.35	9.9896374	10.6554420
31	97635.89	451692.61	462629.67	9.9896095	10.6548430
30	97629.60	451070.85	462022.63	9.9895815	10.6542448

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12 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	21643.96	22169.47	102427.95	9.3353368	9.3457552
31	21672.36	22199.99	102434.56	9.3359062	9.3463527
32	21700.76	22230.51	102441.18	9.3364749	9.3469494
33	21729.15	22261.04	102447.81	9.3370428	9.3475454
34	21757.54	22291.57	102454.45	9.3376099	9.3481407
35	21785.93	22322.11	102461.10	9.3381762	9.3487352
36	21814.32	22352.65	102467.76	9.3387418	9.3493290
37	21842.71	22383.19	102474.42	9.3393065	9.3499220
38	21871.10	22413.74	102481.10	9.3398706	9.3505143
39	21899.48	22444.29	102487.79	9.3404338	9.3511059
40	21927.86	22474.85	102494.48	9.3409963	9.3516968
41	21956.24	22505.41	102501.19	9.3415580	9.3522869
42	21984.62	22535.97	102507.90	9.3421190	9.3528763
43	22013.00	22566.54	102514.63	9.3426792	9.3534650
44	22041.37	22597.11	102521.36	9.3432386	9.3540530
45	22069.74	22627.69	102528.11	9.3437973	9.3546402
46	22098.11	22658.27	102534.86	9.3443552	9.3552267
47	22126.48	22688.85	102541.62	9.3449124	9.3558126
48	22154.85	22719.44	102548.39	9.3454688	9.3563977
49	22183.21	22750.03	102555.18	9.3460245	9.3569821
50	22211.58	22780.63	102561.97	9.3465794	9.3575658
51	22239.94	22811.23	102568.77	9.3471336	9.3581487
52	22268.30	22841.83	102575.58	9.3476870	9.3587310
53	22296.66	22872.44	102582.40	9.3482397	9.3593126
54	22325.01	22903.05	102589.23	9.3487917	9.3598935
55	22353.37	22933.67	102596.07	9.3493429	9.3604736
56	22381.72	22964.29	102602.92	9.3498934	9.3610531
57	22410.07	22994.92	102609.78	9.3504432	9.3616319
58	22438.42	23025.55	102616.65	9.3509922	9.3622100
59	22466.76	23056.18	102623.52	9.3515405	9.3627874
60	22495.11	23086.82	102630.41	9.3520880	9.3633641

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77 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	97629.60	451070.85	462022.63	9.9895815	10.6542448
29	97623.30	450450.72	461417.22	9.9895535	10.6536473
28	97616.99	449832.21	460813.43	9.9895254	10.6530506
27	97610.67	449215.32	460211.26	9.9894973	10.6524546
26	97604.35	448600.04	459610.70	9.9894692	10.6518593
25	97598.02	447986.36	459011.74	9.9894410	10.6512648
24	97591.68	447374.28	458414.39	9.9894128	10.6506710
23	97585.33	446763.79	457818.62	9.9893845	10.6500780
22	97578.97	446154.89	457224.44	9.9893562	10.6494857
21	97572.60	445547.56	456631.83	9.9893279	10.6488941
20	97566.23	444941.81	456040.80	9.9892995	10.6483032
19	97559.85	444337.62	455451.34	9.9892711	10.6477131
18	97553.45	443734.99	454863.44	9.9892427	10.6471237
17	97547.06	443133.92	454277.09	9.9892142	10.6465350
16	97540.65	442534.39	453692.29	9.9891856	10.6459470
15	97534.23	441936.41	453109.03	9.9891571	10.6453598
14	97527.81	441339.96	452527.30	9.9891285	10.6447733
13	97521.38	440745.04	451947.11	9.9890998	10.6441874
12	97514.94	440151.64	451368.44	9.9890711	10.6436023
11	97508.49	439559.77	450791.29	9.9890424	10.6430179
10	97502.03	438969.40	450215.65	9.9890137	10.6424342
9	97495.56	438380.54	449641.52	9.9889849	10.6418513
8	97489.09	437793.17	449068.89	9.9889560	10.6412690
7	97482.61	437207.31	448497.75	9.9889271	10.6406874
6	97476.12	436622.93	447928.10	9.9888982	10.6401065
5	97469.62	436040.03	447359.93	9.9888693	10.6395264
4	97463.11	435458.61	446793.24	9.9888403	10.6389469
3	97456.60	434878.66	446228.03	9.9888113	10.6383681
2	97450.08	434300.18	445664.28	9.9887822	10.6377900
1	97443.55	433723.16	445101.98	9.9887531	10.6372126
0	97437.01	433147.59	444541.15	9.9887239	10.6366359

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13 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
0	22495.11	23086.82	102630.41	9.3520880	9.3633641
1	22523.45	23117.46	102637.29	9.3526349	9.3639401
2	22551.79	23148.11	102644.20	9.3531810	9.3645155
3	22580.13	23178.76	102651.12	9.3537264	9.3650901
4	22608.46	23209.41	102658.05	9.3542710	9.3656641
5	22636.80	23240.07	102664.99	9.3548150	9.3662374
6	22665.13	23270.73	102671.94	9.3553582	9.3668100
7	22693.46	23301.40	102678.90	9.3559007	9.3673819
8	22721.79	23332.07	102685.87	9.3564426	9.3679532
9	22750.12	23362.74	102692.83	9.3569836	9.3685238
10	22778.44	23393.42	102699.82	9.3575240	9.3690937
11	22806.77	23424.10	102706.81	9.3580637	9.3696629
12	22835.09	23454.79	102713.81	9.3586027	9.3702315
13	22863.41	23485.48	102720.82	9.3591409	9.3707994
14	22891.72	23516.17	102727.84	9.3596785	9.3713667
15	22920.04	23546.87	102734.87	9.3602154	9.3719333
16	22948.35	23577.58	102741.91	9.3607515	9.3724992
17	22976.66	23608.29	102748.96	9.3612870	9.3730645
18	23004.97	23639.00	102756.02	9.3618217	9.3736291
19	23033.28	23669.72	102763.09	9.3623558	9.3741930
20	23061.59	23700.44	102770.17	9.3628892	9.3747563
21	23089.89	23731.16	102777.26	9.3634219	9.3753190
22	23118.19	23761.89	102784.36	9.3639539	9.3758810
23	23146.49	23792.62	102791.47	9.3644852	9.3764423
24	23174.79	23823.36	102798.59	9.3650158	9.3770030
25	23203.09	23854.10	102805.72	9.3655458	9.3775631
26	23231.38	23884.85	102812.86	9.3660750	9.3781225
27	23259.67	23915.60	102820.01	9.3666036	9.3786813
28	23287.96	23946.35	102827.17	9.3671315	9.3792394
29	23316.25	23977.11	102834.34	9.3676587	9.3797969
30	23344.54	24007.87	102841.52	9.3681853	9.3803537

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76 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	97437.01	433147.59	444541.15	9.9887239	10.6366359
59	97430.46	432573.47	443981.76	9.9886947	10.6360599
58	97423.90	432000.79	443423.82	9.9886655	10.6354845
57	97417.34	431429.55	442867.31	9.9886363	10.6349099
56	97410.77	430859.74	442312.24	9.9886070	10.6343359
55	97404.19	430291.36	441758.59	9.9885776	10.6337626
54	97397.60	429724.40	441206.37	9.9885482	10.6331900
53	97391.00	429158.85	440655.56	9.9885188	10.6326181
52	97384.39	428594.72	440106.16	9.9884894	10.6320468
51	97377.78	428031.99	439558.17	9.9884599	10.6314762
50	97371.16	427470.66	439011.58	9.9884303	10.6309063
49	97364.53	426910.72	438466.38	9.9884008	10.6303371
48	97357.89	426352.18	437922.57	9.9883712	10.6297685
47	97351.24	425795.01	437380.15	9.9883415	10.6292006
46	97344.58	425239.23	436839.10	9.9883118	10.6286333
45	97337.92	424684.82	436299.43	9.9882821	10.6280667
44	97331.25	424131.77	435761.13	9.9882523	10.6275008
43	97324.57	423580.09	435224.19	9.9882225	10.6269355
42	97317.88	423029.77	434688.61	9.9881927	10.6263709
41	97311.18	422480.80	434154.38	9.9881628	10.6258070
40	97304.48	421933.18	433621.50	9.9881329	10.6252437
39	97297.77	421386.90	433089.96	9.9881029	10.6246810
38	97291.05	420841.96	432559.77	9.9880729	10.6241190
37	97284.32	420298.35	432030.90	9.9880429	10.6235577
36	97277.58	419756.06	431503.36	9.9880128	10.6229970
35	97270.84	419215.10	430977.15	9.9879827	10.6224369
34	97264.09	418675.46	430452.25	9.9879525	10.6218775
33	97257.33	418137.13	429928.67	9.9879223	10.6213187
32	97250.56	417600.11	429406.40	9.9878921	10.6207606
31	97243.78	417064.40	428885.43	9.9878618	10.6202031
30	97236.99	416529.98	428365.76	9.9878315	10.6196463

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13 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	23344.54	24007.87	102841.52	9.3681853	9.3803537
31	23372.82	24038.64	102848.71	9.3687111	9.3809100
32	23401.10	24069.42	102855.91	9.3692363	9.3814655
33	23429.38	24100.19	102863.12	9.3697608	9.3820205
34	23457.66	24130.97	102870.34	9.3702847	9.3825748
35	23485.94	24161.76	102877.55	9.3708079	9.3831285
36	23514.21	24192.55	102884.79	9.3713304	9.3836816
37	23542.48	24223.34	102892.03	9.3718523	9.3842340
38	23570.75	24254.14	102899.29	9.3723735	9.3847858
39	23599.02	24284.94	102906.55	9.3728940	9.3853370
40	23627.29	24315.75	102913.83	9.3734139	9.3858876
41	23655.55	24346.56	102921.11	9.3739331	9.3864376
42	23683.81	24377.37	102928.40	9.3744517	9.3869869
43	23712.07	24408.19	102935.72	9.3749696	9.3875356
44	23740.33	24439.01	102943.03	9.3754868	9.3880837
45	23768.59	24469.84	102950.35	9.3760034	9.3886312
46	23796.84	24500.67	102957.68	9.3765194	9.3891781
47	23825.10	24531.51	102965.02	9.3770347	9.3897244
48	23853.35	24562.35	102972.37	9.3775493	9.3902700
49	23881.59	24593.20	102979.73	9.3780633	9.3908151
50	23909.84	24624.05	102987.10	9.3785767	9.3913595
51	23938.08	24654.91	102994.48	9.3790894	9.3919034
52	23966.33	24685.77	103001.88	9.3796015	9.3924466
53	23994.57	24716.63	103009.27	9.3801129	9.3929893
54	24022.80	24747.50	103016.68	9.3806237	9.3935313
55	24051.04	24778.37	103024.10	9.3811339	9.3940727
56	24079.27	24809.25	103031.53	9.3816434	9.3946136
57	24107.51	24840.13	103038.97	9.3821523	9.3951538
58	24135.74	24871.02	103046.42	9.3826605	9.3956935
59	24163.96	24901.91	103053.88	9.3831682	9.3962326
60	24192.19	24932.80	103061.35	9.3836752	9.3967711

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76 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	97236.99	416529.98	4283[illegible]5.76	9.9878315	10.6196463
29	97230.19	415996.85	427847.38	9.9878012	10.6190900
28	97223.39	415465.01	427330.29	9.9877708	10.6185345
27	97216.58	414934.46	426814.49	9.9877404	10.6179795
26	97209.76	414405.19	426299.96	9.9877099	10.6174252
25	97202.93	413877.19	425786.71	9.9876794	10.6168715
24	97196.09	413350.46	425274.74	9.9876488	10.6163184
23	97189.25	412824.99	424764.02	9.9876183	10.6157660
22	97182.40	412300.79	424254.57	9.9875876	10.6152142
21	97175.54	411777.84	423746.37	9.9875570	10.6146630
20	97168.67	411256.14	423239.43	9.9875263	10.6141124
19	97161.79	410735.69	422733.73	9.9874955	10.6135624
18	97154.91	410216.49	422229.28	9.9874648	10.6130131
17	97148.02	409698.52	421726.06	9.9874339	10.6124644
16	97141.12	409181.78	421224.08	9.9874031	10.6119163
15	97134.21	408666.27	420723.33	9.9873722	10.6113688
14	97127.29	408151.99	420223.80	9.9873413	10.6108219
13	97120.36	407638.92	419725.49	9.9873103	10.6102756
12	97113.43	407127.07	419228.40	9.9872793	10.6097300
11	97106.49	406616.43	418732.52	9.9872482	10.6091849
10	97099.54	406107.00	418237.85	9.9872171	10.6086405
9	97092.58	405598.77	417744.38	9.9871860	10.6080966
8	97085.61	405091.74	417252.10	9.9871549	10.6075534
7	97078.63	404585.90	416761.02	9.9871236	10.6070107
6	97071.65	404081.25	416271.14	9.9870924	10.6064687
5	97064.66	403577.79	415782.43	9.9870611	10.6059273
4	97057.66	403075.50	415294.91	9.9870298	10.6053864
3	97050.65	402574.40	414808.56	9.9869984	10.6048462
2	97043.63	402074.46	414323.39	9.9869670	10.6043065
1	97036.61	401575.70	413839.39	9.9869356	10.6037674
0	97029.57	401078.09	413356.55	9.9869041	10.6032289

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14 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	24192.19	24932.80	103061.35	9.3836752	9.3967711
1	24220.41	24963.70	103068.83	9.3841815	9.3973089
2	24248.63	24994.60	103076.32	9.3846873	9.3978463
3	24276.85	25025.51	103083.82	9.3851924	9.3983830
4	24305.07	25056.42	103091.33	9.3856969	9.3989191
5	24333.29	25087.34	103098.85	9.3862008	9.3994547
6	24361.50	25118.26	103106.38	9.3867040	9.3999896
7	24389.71	25149.19	103113.92	9.3872067	9.4005240
8	24417.92	25180.12	103121.47	9.3877087	9.4010578
9	24446.13	25211.06	103129.03	9.3882101	9.4015910
10	24474.33	25242.00	103136.60	9.3887109	9.4021237
11	24502.54	25272.94	103144.18	9.3892111	9.4026558
12	24530.74	25303.89	103151.77	9.3897106	9.4031873
13	24558.94	25334.84	103159.36	9.3902096	9.4037182
14	24587.13	25365.80	103166.97	9.3907079	9.4042486
15	24615.33	25396.76	103174.59	9.3912057	9.4047784
16	24643.52	25427.73	103182.22	9.3917028	9.4053076
17	24671.71	25458.70	103189.85	9.3921993	9.4058363
18	24699.90	25489.68	103197.50	9.3926952	9.4063644
19	24728.09	25520.66	103205.16	9.3931905	9.4068919
20	24756.27	25551.65	103212.82	9.3936852	9.4074189
21	24784.45	25582.64	103220.50	9.3941794	9.4079453
22	24812.63	25613.63	103228.18	9.3946729	9.4084712
23	24840.81	25644.63	103235.88	9.3951658	9.4089965
24	24868.99	25675.64	103243.59	9.3956581	9.4095212
25	24897.16	25706.64	103251.30	9.3961499	9.4100454
26	24925.33	25737.66	103259.03	9.3966410	9.4105690
27	24953.50	25768.68	103266.76	9.3971315	9.4110921
28	24981.67	25799.70	103274.51	9.3976215	9.4116146
9	25009.84	25830.73	103282.27	9.3981109	9.4121366
30	25038.00	25861.76	103290.03	9.3985996	9.4126581

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75 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	97029.57	401078.09	413356.55	9.9869041	10.6032289
59	97022.53	400581.65	412874.87	9.9868726	10.6026911
58	97015.48	400086.36	412394.35	9.9868410	10.6021537
57	97008.42	399592.23	411914.98	9.9868094	10.6016170
56	97001.35	399099.24	411436.75	9.9867778	10.6010809
55	96994.28	398607.39	410959.67	9.9867461	10.6005453
54	96987.20	398116.69	410483.74	9.9867144	10.6000104
53	96980.11	397627.12	410008.93	9.9866827	10.5994760
52	96973.01	397138.68	409535.26	9.9866509	10.5989422
51	96965.90	396651.37	409062.72	9.9866191	10.5984090
50	96958.79	396165.18	408591.30	9.9865872	10.5978763
49	96951.67	395680.11	408121.00	9.9865553	10.5973442
48	96944.53	395196.15	407651.81	9.9865233	10.5968127
47	96937.40	394713.31	407183.74	9.9864913	10.5962818
46	96930.25	394231.57	406716.77	9.9864593	10.5957514
45	96923.09	393750.94	406250.91	9.9864273	10.5952216
44	96915.92	393271.41	405786.15	9.9863952	10.5946924
43	96908.75	392792.97	405322.49	9.9863630	10.5941637
42	96901.57	392315.63	404859.92	9.9863308	10.5936356
41	96894.38	391839.37	404398.44	9.9862986	10.5931081
40	96887.18	391364.20	403938.04	9.9862663	10.5925811
39	96879.98	390890.11	403478.72	9.9862340	10.5920547
38	96872.77	390417.10	403020.48	9.9862017	10.5915288
37	96865.55	389945.16	402563.32	9.9861693	10.5910035
36	96858.32	389474.29	402107.22	9.9861369	10.5904788
35	96851.08	389004.48	401652.19	9.9861045	10.5899546
34	96843.83	388535.74	401198.23	9.9860720	10.5894310
33	96836.57	388068.05	400745.32	9.9860394	10.5889079
32	96829.31	387601.42	400293.47	9.9860069	10.5883854
31	96822.04	387135.84	399842.67	9.9859742	10.5878634
30	96814.76	386671.31	399392.92	9.9859416	10.5873419

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14 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	25038.00	25861.76	103290.03	9.3985996	9.4126581
31	25066.16	25892.80	103297.81	9.3990878	9.4131789
32	25094.32	25923.84	103305.59	9.3995754	9.4136993
33	25122.48	25954.88	103313.39	9.4000625	9.4142191
34	25150.63	25985.93	103321.19	9.4005489	9.4147383
35	25178.79	26016.99	103329.01	9.4010348	9.4152570
36	25206.94	26048.05	103336.83	9.4015201	9.4157752
37	25235.08	26079.11	103344.67	9.4020048	9.4162928
38	25263.23	26110.18	103352.51	9.4024889	9.4168099
39	25291.37	26141.26	103360.37	9.4029724	9.4173265
40	25319.52	26172.34	103368.23	9.4034554	9.4178425
41	25347.66	26203.42	103376.11	9.4039378	9.4183580
42	25375.79	26234.51	103383.99	9.4044196	9.4188729
43	25403.93	26265.60	103391.88	9.4049009	9.4193874
44	25432.06	26296.70	103399.79	9.4053816	9.4199013
45	25460.19	26327.80	103407.70	9.4058617	9.4204146
46	25488.32	26358.91	103415.63	9.4063413	9.4209275
47	25516.45	26390.02	103423.56	9.4068203	9.4214398
48	25544.58	26421.14	103431.51	9.4072987	9.4219515
49	25572.70	26452.26	103439.46	9.4077766	9.4224628
50	25600.82	26483.39	103447.43	9.4082539	9.4229735
51	25628.94	26514.52	103455.40	9.4087306	9.4234838
52	25657.05	26545.66	103463.38	9.4092068	9.4239935
53	25685.17	26576.80	103471.38	9.4096824	9.4245026
54	25713.28	26607.94	103479.38	9.4101575	9.4250113
55	25741.39	26639.09	103487.40	9.4106320	9.4255194
56	25769.50	26670.25	103495.42	9.4111059	9.4260271
57	25797.60	26701.41	103503.46	9.4115793	9.4265342
58	25825.70	26732.57	103511.50	9.4120522	9.4270408
59	25853.81	26763.74	103519.55	9.4125245	9.4275469
60	25881.90	26794.92	103527.62	9.4129962	9.4280525

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75 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	96814.76	386671.31	399392.92	9.9859416	10.5873419
29	96807.47	386207.82	398944.21	9.9859089	10.5868211
28	96800.18	385745.37	398496.54	9.9858762	10.5863007
27	96792.88	385283.96	398049.91	9.9858434	10.5857809
26	96785.57	384823.58	397604.31	9.9858106	10.5852617
25	96778.25	384364.24	397159.75	9.9857777	10.5847430
24	96770.92	383905.91	396716.21	9.9857449	10.5842248
23	96763.58	383448.61	396273.69	9.9857119	10.5837072
22	96756.23	382992.33	395832.19	9.9856790	10.5831901
21	96748.88	382537.07	395391.71	9.9856460	10.5826735
20	96741.52	382082.81	394952.24	9.9856129	10.5821575
19	96734.15	381629.57	394513.79	9.9855798	10.5816420
18	96726.77	381177.33	394076.33	9.9855467	10.5811271
17	96719.38	380726.09	393639.88	9.9855135	10.5806126
16	96711.99	380275.85	393204.43	9.9854803	10.5800987
15	96704.59	379826.61	392769.97	9.9854471	10.5795854
14	96697.18	379378.35	392336.51	9.9854138	10.5790725
13	96689.76	378931.09	391904.03	9.9853805	10.5785602
12	96682.33	378484.81	391472.54	9.9853471	10.5780485
11	96674.90	378039.51	391042.03	9.9853138	10.5775372
10	96667.46	377595.19	390612.50	9.9852803	10.5770265
9	96660.01	377151.85	390183.95	9.9852468	10.5765162
8	96652.55	376709.47	389756.37	9.9852133	10.5760065
7	96645.08	376268.07	389329.76	9.9851798	10.5754974
6	96637.60	375827.63	388904.11	9.9851462	10.5749887
5	96630.12	375388.15	388479.43	9.9851125	10.5744806
4	96622.63	374949.63	388055.70	9.9850789	10.5739729
3	96615.13	374512.07	387632.93	9.9850452	10.5734658
2	96607.62	374075.46	387211.12	9.9850114	10.5729592
1	96600.11	373639.80	386790.25	9.9849776	10.5724531
0	96592.58	373205.08	386370.33	9.9849438	10.5719475

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15 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
0	25881.90	26794.92	103527.62	9.4129962	9.4280525
1	25910.00	26826.10	103535.69	9.4134674	9.4285575
2	25938.10	26857.28	103543.78	9.4139381	9.4290621
3	25966.19	26888.47	103551.87	9.4144082	9.4295661
4	25994.28	26919.67	103559.98	9.4148778	9.4300697
5	26022.37	26950.87	103568.09	9.4153468	9.4305727
6	26050.45	26982.07	103576.21	9.4158152	9.4310753
7	26078.53	27013.28	103584.35	9.4162832	9.4315773
8	26106.61	27044.49	103592.49	9.4167506	9.4320789
9	26134.69	27075.71	103600.65	9.4172174	9.4325799
10	26162.77	27106.93	103608.81	9.4176837	9.4330804
11	26190.85	27138.16	103616.99	9.4181495	9.4335805
12	26218.92	27169.40	103625.17	9.4186148	9.4340800
13	26246.99	27200.64	103633.37	9.4190795	9.4345791
14	26275.06	27231.88	103641.57	9.4195436	9.4350776
15	26303.12	27263.13	103649.79	9.4200073	9.4355757
16	26331.18	27294.38	103658.01	9.4204704	9.4360733
17	26359.24	27325.64	103666.25	9.4209330	9.4365704
18	26387.30	27356.90	103674.49	9.4213950	9.4370670
19	26415.36	27388.17	103682.75	9.4218566	9.4375631
20	26443.42	27419.44	103691.01	9.4223176	9.4380587
21	26471.47	27450.72	103699.29	9.4227780	9.4385538
22	26499.52	27482.01	103707.57	9.4232380	9.4390485
23	26527.57	27513.30	103715.87	9.4236974	9.4395426
24	26555.61	27544.59	103724.17	9.4241563	9.4400363
25	26583.65	27575.89	103732.49	9.4246147	9.4405295
26	26611.69	27607.19	103740.82	9.4250726	9.4410222
27	26639.73	27638.50	103749.15	9.4255299	9.4415145
28	26667.77	27669.81	103757.50	9.4259867	9.4420062
29	26695.81	27701.13	103765.85	9.4264430	9.4424975
30	26723.84	27732.45	103774.22	9.4268988	9.4429883

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74 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	96592.58	373205.08	386370.33	9.9849438	10.5719475
59	96585.05	372771.31	385951.35	9.9849099	10.5714425
58	96577.51	372338.47	385533.32	9.9848760	10.5709379
57	96569.96	371906.58	385116.22	9.9848420	10.5704339
56	96562.40	371475.61	384700.05	9.9848081	10.5699303
55	96554.83	371045.58	384284.82	9.9847740	10.5694273
54	96547.26	370616.48	383870.51	9.9847400	10.5689247
53	96539.68	370188.30	383457.13	9.9847059	10.5684227
52	96532.09	369761.03	383044.67	9.9846717	10.5679211
51	96524.49	369334.69	382633.13	9.9846375	10.5674201
50	96516.88	368909.27	382222.51	9.9846033	10.5669196
49	96509.27	368484.75	381812.80	9.9845690	10.5664195
48	96501.65	368061.15	381403.99	9.9845347	10.5659200
47	96494.02	367638.45	380996.10	9.9845004	10.5654209
46	96486.38	367216.65	380589.11	9.9844660	10.5649224
45	96478.73	366795.75	380183.01	9.9844316	10.5644243
44	96471.08	366375.75	379777.82	9.9843971	10.5639267
43	96463.41	365956.65	379373.52	9.9843626	10.5634296
42	96455.74	365538.44	378970.11	9.9843281	10.5629330
41	96448.06	365121.11	378567.60	9.9842935	10.5624369
40	96440.37	364704.67	378165.96	9.9842589	10.5619413
39	96432.68	364289.11	377765.22	9.9842242	10.5614462
38	96424 97	363874.44	377365.35	9.9841895	10.5609515
37	96417.26	363460.64	376966.36	9.9841548	10.5604574
36	96409.54	363047.71	376568.24	9.9841200	10.5599637
35	96401.81	362635.66	376171.00	9.9840852	10.5594705
34	96394.07	362224.47	375774.62	9.9840503	10.5589778
33	96386.33	361814.15	375379.11	9.9840154	10.5584855
32	96378.58	361404.69	374984.47	9.9839805	10.5579938
31	96370.81	360996.09	374590.68	9.9839455	10.5575025
30	96363.05	360588.35	374197.75	9.9839105	10.5570117

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15 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	26723.84	27732.45	103774.22	9.4268988	9.4429883
31	26751.87	27763.78	103782.60	9.4273541	9.4434786
32	26779.89	27795.12	103790.98	9.4278089	9.4439685
33	26807.92	27826.46	103799.38	9.4282631	9.4444579
34	26835.94	27857.80	103807.79	9.4287169	9.4449468
35	26863.96	27889.15	103816.21	9.4291701	9.4454352
36	26891.98	27920.50	103824.63	9.4296228	9.4459232
37	26920.00	27951.86	103833.07	9.4300750	9.4464107
38	26948.01	27983.22	103841.52	9.4305267	9.4468978
39	26976.02	28014.59	103849.98	9.4309779	9.4473843
40	27004.03	28045.97	103858.44	9.4314286	9.4478704
41	27032.04	28077.35	103866.92	9.4318788	9.4483561
42	27060.04	28108.73	103875.41	9.4323285	9.4488413
43	27088.05	28140.12	103883.91	9.4327777	9.4493260
44	27116.05	28171.52	103892.42	9.4332264	9.4498102
45	27144.04	28202.92	103900.94	9.4336746	9.4502940
46	27172.04	28234.32	103909.47	9.4341223	9.4507774
47	27200.03	28265.73	103918.00	9.4345694	9.4512602
48	27228.02	28297.15	103926.55	9.4350161	9.4517427
49	27256.01	28328.57	103935.11	9.4354623	9.4522246
50	27284.00	28359.99	103943.68	9.4359080	9.4527061
51	27311.98	28391.42	103952.26	9.4363532	9.4531872
52	27339.96	28422.86	103960.85	9.4367980	9.4536678
53	27367.94	28454.30	103969.45	9.4372422	9.4541479
54	27395.92	28485.75	103978.06	9.4376859	9.4546276
55	27423.90	28517.20	103986.69	9.4381292	9.4551069
56	27451.87	28548.66	103995.32	9.4385719	9.4555857
57	27479.84	28580.12	104003.96	9.4390142	9.4560641
58	27507.81	28611.59	104012.61	9.4394560	9.4565420
59	27535.78	28643.06	104021.27	9.4398973	9.4570194
60	27563.74	28674.54	104029.94	9.4403381	9.4574964

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74 Grad.

Minut.	Sinus.	Tang.	Secant.		Log. Sin.	Log. Tang.
30	96363.05	360588.35	374197.75		9.9839105	10.5570117
29	96355.27	360181.46	373805.68		9.9838755	10.5565214
28	96347.48	359775.43	373414.46		9.9838404	10.5560315
27	96339.69	359370.24	373024.09		9.9838052	10.5555421
26	96331.89	358965.90	372634.57		9.9837701	10.5550532
25	96324.08	358562.41	372245.89		9.9837348	10.5545648
24	96316.26	358159.75	371858.05		9.9836996	10.5540768
23	96308.43	357757.94	371471.05		9.9836643	10.5535893
22	96300.59	357356.96	371084.89		9.9836290	10.5531022
21	96292.75	356956.81	370699.56		9.9835936	10.5526157
20	96284.90	356557.49	370315.06		9.9835582	10.5521296
19	96277.04	356159.00	369931.39		9.9835227	10.5516439
18	96269.17	355761.33	369548.54		9.9834872	10.5511587
17	96261.30	355364.49	369166.52		9.9834517	10.5506740
16	96253.42	354968.46	368785.32		9.9834161	10.5501898
15	96245.53	354573.25	368404.93		9.9833805	10.5497060
14	96237.63	354178.86	368025.36		9.9833449	10.5492226
13	96229.72	353785.28	367646.60		9.9833092	10.5487398
12	96221.80	353392.51	367268.65		9.9832735	10.5482573
11	96213.87	353000.54	366891.51		9.9832377	10.5477754
10	96205.94	352609.38	366515.18		9.9832019	10.5472939
9	96198.00	352219.02	366139.64		9.9831661	10.5468128
8	96190.05	351829.46	365764.91		9.9831302	10.5463322
7	96182.09	351440.70	365390.97		9.9830942	10.5458521
6	96174.13	351052.73	365017.83		9.9830583	10.5453724
5	96166.16	350665.55	364645.48		9.9830223	10.5448931
4	96158.18	350279.16	364273.92		9.9829862	10.5444143
3	96150.19	349893.56	363903.15		9.9829501	10.5439359
2	96142.19	349508.74	363533.16		9.9829140	10.5434580
1	96134.18	349124.70	363163.95		9.9828778	10.5429806
0	96126.17	348741.44	362795.53		9.9828416	10.5425036

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16 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	27563.74	28674.54	104029.94	9.4403381	9.4574964
1	27591.70	28706.02	104038.63	9.4407784	9.4579730
2	27619.65	28737.51	104047.32	9.4412182	9.4584491
3	27647.61	28769.00	104056.02	9.4416576	9.4589248
4	27675.56	28800.50	104064.73	9.4420965	9.4594001
5	27703.52	28832.01	104073.46	9.4425349	9.4598749
6	27731.47	28863.52	104082.19	9.4429728	9.4603492
7	27759.41	28895.03	104090.94	9.4434103	9.4608232
8	27787.36	28926.55	104099.69	9.4438472	9.4612967
9	27815.30	28958.08	104108.45	9.4442837	9.4617697
10	27843.24	28989.61	104117.23	9.4447197	9.4622423
11	27871.18	29021.14	104126.01	9.4451553	9.4627145
12	27899.11	29052.69	104134.81	9.4455904	9.4631863
13	27927.04	29084.23	104143.62	9.4460250	9.4636576
14	27954.97	29115.78	104152.43	9.4464591	9.4641285
15	27982.90	29147.34	104161.26	9.4468927	9.4645990
16	28010.83	29178.90	104170.09	9.4473259	9.4650690
17	28038.75	29210.47	104178.94	9.4477586	9.4655386
18	28066.67	29242.05	104187.80	9.4481909	9.4660078
19	28094.59	29273.63	104196.67	9.4486227	9.4664765
20	28122.51	29305.21	104205.54	9.4490540	9.4669448
21	28150.42	29336.80	104214.43	9.4494849	9.4674127
22	28178.33	29368.39	104223.33	9.4499153	9.4678802
23	28206.24	29399.99	104232.24	9.4503452	9.4683473
24	28234.15	29431.60	104241.16	9.4507747	9.4688139
25	28262.05	29463.21	104250.09	9.4512037	9.4692801
26	28289.95	29494.83	104259.03	9.4516322	9.4697459
27	28317.85	29526.45	104267.98	9.4520603	9.4702112
28	28345.75	29558.08	104276.94	9.4524879	9.4706762
29	28373.64	29589.71	104285.91	9.4529151	9.4711407
30	28401.53	29621.35	104294.89	9.4533418	9.4716048

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73 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	96126.17	348741.44	362795.53	9.9828416	10.5425036
59	96118.15	348358.96	362427.88	9.9828054	10.5420270
58	96110.12	347977.26	362061.01	9.9827691	10.5415509
57	96102.08	347596.32	361694.90	9.9827328	10.5410752
56	96094.03	347216.16	361329.57	9.9826964	10.5405999
55	96085.98	346836.76	360965.01	9.9826600	10.5401251
54	96077.92	346458.13	360601.21	9.9826236	10.5396508
53	96069.84	346080.26	360238.18	9.9825871	10.5391768
52	96061.77	345703.15	359875.90	9.9825506	10.5387033
51	96053.68	345326.79	359514.39	9.9825140	10.5382303
50	96045.58	344951.20	359153.63	9.9824774	10.5377577
49	96037.48	344576.35	358793.62	9.9824408	10.5372855
48	96029.37	344202.26	358434.37	9.9824041	10.5368137
47	96021.25	343828.91	358075.86	9.9823674	10.5363424
46	96013.12	343456.31	357718.10	9.9823306	10.5358715
45	96004.98	343084.46	357361.08	9.9822938	10.5354010
44	95996.84	342713.34	357004.81	9.9822569	10.5349310
43	95988.69	342342.97	356649.28	9.9822201	10.5344614
42	95980.53	341973.33	356294.48	9.9821831	10.5339922
41	95972.36	341604.43	355940.42	9.9821462	10.5335235
40	95964.18	341236.26	355587.10	9.9821092	10.5330552
39	95956.00	340868.82	355234.50	9.9820721	10.5325873
38	95947.81	340502.10	354882.63	9.9820351	10.5321198
37	95939.61	340136.12	354531.49	9.9819979	10.5316527
36	95931.40	339770.85	354181.07	9.9819608	10.5311861
35	95923.18	339406.31	353831.38	9.9819236	10.5307199
34	95914.96	339042.49	353482.40	9.9818863	10.5302541
33	95906.72	338679.38	353134.14	9.9818490	10.5297888
32	95898.48	338316.99	352786.60	9.9818117	10.5293238
31	95890.23	337955.31	352439.77	9.9817744	10.5288593
30	95881.97	337594.34	352093.65	9.9817370	10.5283952

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16 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	28401.53	29621.35	104294.89	9.4533418	9.4716048
31	28429.42	29652.99	104303.88	9.4537681	9.4720685
32	28457.31	29684.64	104312.89	9.4541939	9.4725318
33	28485.20	29716.30	104321.90	9.4546192	9.4729947
34	28513.08	29747.96	104330.92	9.4550441	9.4734572
35	28540.96	29779.62	104339.95	9.4554686	9.4739192
36	28568.84	29811.29	104349.00	9.4558926	9.4743808
37	28596.71	29842.97	104358.05	9.4563161	9.4748421
38	28624.58	29874.65	104367.12	9.4567392	9.4753029
39	28652.46	29906.34	104376.19	9.4571618	9.4757633
40	28680.32	29938.03	104385.28	9.4575840	9.4762233
41	28708.19	29969.73	104394.37	9.4580058	9.4766829
42	28736.05	30001.44	104403.48	9.4584271	9.4771421
43	28763.91	30033.15	104412.59	9.4588480	9.4776009
44	28791.77	30064.86	104421.72	9.4592684	9.4780592
45	28819.63	30096.58	104430.86	9.4596884	9.4785172
46	28847.48	30128.31	104440.01	9.4601079	9.4789748
47	28875.33	30160.04	104449.17	9.4605270	9.4794319
48	28903.18	30191.78	104458.33	9.4609456	9.4798887
49	28931.03	30223.52	104467.51	9.4613638	9.4803451
50	28958.87	30255.27	104476.70	9.4617816	9.4808011
51	28986.71	30287.03	104485.90	9.4621989	9.4812566
52	29014.55	30318.79	104495.11	9.4626158	9.4817118
53	29042.39	30350.55	104504.33	9.4630323	9.4821666
54	29070.22	30382.32	104513.57	9.4634483	9.4826210
55	29098.05	30414.10	104522.81	9.4638639	9.4830750
56	29125.88	30445.88	104532.06	9.4642790	9.4835286
57	29153.71	30477.67	104541.32	9.4646938	9.4839818
58	29181.53	30509.46	104550.60	9.4651081	9.4844346
59	29209.35	30541.26	104559.88	9.4655219	9.4848870
60	29237.17	30573.07	104569.18	9.4659353	9.4853390

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Minut.	73 Grad.				
	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	95881.97	337594.34	352093.65	9.9817370	10.5283952
29	95873.70	337234.08	351748.24	9.9816995	10.5279315
28	95865.43	336874.53	351403.54	9.9816620	10.5274682
27	95857.15	336515.68	351059.54	9.9816245	10.5270053
26	95848.86	336157.53	350716.25	9.9815870	10.5265428
25	95840.56	335800.08	350373.65	9.9815494	10.5260808
24	95832.25	335443.33	350031.75	9.9815117	10.5256192
23	95823.94	335087.28	349690.55	9.9814740	10.5251579
22	95815.62	334731.91	349350.04	9.9814363	10.5246971
21	95807.29	334377.24	349010.23	9.9813986	10.5242367
20	95798.95	334023.26	348671.10	9.9813608	10.5237767
19	95790.60	333669.97	348332.67	9.9813229	10.5233171
18	95782.25	333317.36	347994.92	9.9812850	10.5228579
17	95773.89	332965.43	347657.85	9.9812471	10.5223991
16	95765.52	332614.19	347321.46	9.9812091	10.5219408
15	95757.14	332263.62	346985.76	9.9811711	10.5214828
14	95748.75	331913.73	346650.73	9.9811331	10.5210252
13	95740.35	331564.52	346316.37	9.9810950	10.5205681
12	95731.95	331215.98	345982.69	9.9810569	10.5201113
11	95723.54	330868.11	345649.69	9.9810187	10.5196549
10	95715.12	330520.91	345317.35	9.9809805	10.5191989
9	95706.69	330174.38	344985.68	9.9809423	10.5187434
8	95698.25	329828.51	344654.67	9.9809040	10.5182882
7	95689.81	329483.30	344324.33	9.9808657	10.5178334
6	95681.36	329138.76	343994.65	9.9808273	10.5173790
5	95672.90	328794.87	343665.63	9.9807889	10.5169250
4	95664.43	328451.64	343337.27	9.9807505	10.5164714
3	95655.95	328109.07	343009.56	9.9807120	10.5160182
2	95647.47	327767.15	342682.51	9.9806735	10.5155654
1	95638.98	327425.88	342356.11	9.9806349	10.5151130
0	95630.48	327085.26	342030.36	9.9805963	10.5146610

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17 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	29237.17	30573.07	104569.18	9.4659353	9.4853390
1	29264.99	30604.88	104578.48	9.4663483	9.4857907
2	29292.80	30636.69	104587.80	9.4667609	9.4862419
3	29320.61	30668.52	104597.12	9.4671730	9.4866928
4	29348.42	30700.34	104606.46	9.4675848	9.4871433
5	29376.23	30732.18	104615.81	9.4679960	9.4875933
6	29404.03	30764.02	104625.16	9.4684069	9.4880430
7	29431.83	30795.86	104634.53	9.4688173	9.4884924
8	29459.63	30827.71	104643.91	9.4692273	9.4889413
9	29487.43	30859.57	104653.30	9.4696369	9.4893898
10	29515.22	30891.43	104662.70	9.4700461	9.4898380
11	29543.02	30923.30	104672.11	9.4704548	9.4902858
12	29570.81	30955.17	104681.53	9.4708631	9.4907332
13	29598.59	30987.05	104690.96	9.4712710	9.4911802
14	29626.38	31018.93	104700.40	9.4716785	9.4916269
15	29654.16	31050.83	104709.86	9.4720856	9.4920731
16	29681.94	31082.72	104719.32	9.4724922	9.4925190
17	29709.71	31114.62	104728.79	9.4728985	9.4929646
18	29737.49	31146.53	104738.28	9.4733043	9.4934097
19	29765.26	31178.45	104747.77	9.4737097	9.4938545
20	29793.03	31210.36	104757.28	9.4741146	9.4942988
21	29820.79	31242.29	104766.79	9.4745192	9.4947429
22	29848.56	31274.22	104776.32	9.4749234	9.4951865
23	29876.32	31306.16	104785.86	9.4753271	9.4956298
24	29904.08	31338.10	104795.40	9.4757304	9.4960727
25	29931.84	31370.05	104804.96	9.4761334	9.4965152
26	29959.59	31402.00	104814.53	9.4765359	9.4969574
27	29987.34	31433.96	104824.11	9.4769380	9.4973991
28	30015.09	31465.93	104833.70	9.4773396	9.4978406
29	30042.84	31497.90	104843.30	9.4777409	9.4982816
30	30070.58	31529.88	104852.91	9.4781418	9.4987223

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72 Grad.

Minut.	Sinus.	Tang.	Secant.		Log. Sin.	Log. Tang.
60	95630.48	327085.26	342030.36		9.9805963	10.5146610
59	95621.97	326745.29	341705.26		9.9805577	10.5142093
58	95613.45	326405.96	341380.80		9.9805190	10.5137581
57	95604.92	326067.28	341056.99		9.9804803	10.5133072
56	95596.39	325729.24	340733.82		9.9804415	10.5128567
55	95587.85	325391.84	340411.30		9.9804027	10.5124067
54	95579.30	325055.08	340089.41		9.9803639	10.5119570
53	95570.74	324718.95	339768.16		9.9803250	10.5115076
52	95562.18	324383.46	339447.54		9.9802860	10.5110587
51	95553.60	324048.60	339127.55		9.9802471	10.5106102
50	95545.02	323714.38	338808.20		9.9802081	10.5101620
49	95536.43	323380.78	338489.48		9.9801690	10.5097142
48	95527.84	323047.80	338171.38		9.9801299	10.5092668
47	95519.22	322715.46	337853.91		9.9800908	10.5088198
46	95510.61	322383.73	337537.07		9.9800516	10.5083731
45	95501.99	322052.63	337220.84		9.9800124	10.5079269
44	95493.36	321722.15	336905.24		9.9799732	10.5074810
43	95484.72	321392.28	336590.26		9.9799339	10.5070354
42	95476.07	321063.04	336275.89		9.9798946	10.5065903
41	95467.43	320734.40	335962.14		9.9798552	10.5061455
40	95458.76	320406.38	335649.00		9.9798158	10.5057012
39	95450.09	320078.97	335336.47		9.9797764	10.5052571
38	95441.41	319752.17	335024.55		9.9797369	10.5048135
37	95432.72	319425.98	334713.24		9.9796973	10.5043702
36	95424.03	319100.39	334402.54		9.9796578	10.5039273
35	95415.33	318775.40	334092.44		9.9796182	10.5034848
34	95406.62	318451.02	333782.94		9.9795785	10.5030426
33	95397.90	318127.24	333474.05		9.9795388	10.5026009
32	95389.17	317804.06	333165.75		9.9794991	10.5021594
31	95380.44	317481.47	332858.05		9.9794593	10.5017184
30	95371.69	317159.48	332550.95		9.9794195	10.5012777

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17 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	30070.58	31529.88	104852.91	9.4781418	9.4987223
31	30098.32	31561.86	104862.53	9.4785423	9.4991626
32	30126.06	31593.85	104872.17	9.4789423	9.4996026
33	30153.80	31625.85	104881.81	9.4793420	9.5000422
34	30181.53	31657.85	104891.46	9.4797412	9.5004814
35	30209.26	31689.86	104901.13	9.4801401	9.5009203
36	30236.99	31721.87	104910.80	9.4805385	9.5013588
37	30264.71	31753.89	104920.49	9.4809366	9.5017969
38	30292.44	31785.91	104930.19	9.4813342	9.5022347
39	30320.16	31817.94	104939.89	9.4817315	9.5026721
40	30347.88	31849.98	104949.61	9.4821283	9.5031092
41	30375.59	31882.02	104959.34	9.4825248	9.5035459
42	30403.31	31914.07	104969.08	9.4829208	9.5039822
43	30431.02	31946.13	104978.83	9.4833165	9.5044182
44	30458.72	31978.19	104988.59	9.4837117	9.5048538
45	30486.43	32010.25	104998.36	9.4841066	9.5052891
46	30514.13	32042.32	105004.15	9.4845010	9.5057240
47	30541.83	32074.40	105017.94	9.4848951	9.5061586
48	30569.53	32106.49	105027.74	9.4852888	9.5065928
49	30597.23	32138.58	105037.56	9.4856820	9.5070267
50	30624.92	32170.67	105047.38	9.4860749	9.5074602
51	30652.61	32202.77	105057.22	9.4864674	9.5078933
52	30680.30	32234.88	105067.06	9.4868595	9.5083261
53	30707.98	32267.00	105076.92	9.4872512	9.5087586
54	30735.66	32299.12	105086.79	9.4876426	9.5091907
55	30763.34	32331.25	105096.67	9.4880335	9.5096224
56	30791.02	32363.38	105106.56	9.4884240	9.5100539
57	30818.69	32395.52	105116.46	9.4888142	9.5104849
58	30846.36	32427.66	105126.37	9.4892040	9.5109156
59	30874.03	32459.81	105136.29	9.4895934	9.5113460
60	30901.70	32491.97	105146.22	9.4899824	9.5117760

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72 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	95371.69	317159.48	332550.95	9.9794195	10.5012777
29	95362.94	316838.08	332244.44	9.9793796	10.5008374
28	95354.18	316517.28	331938.53	9.9793398	10.5003974
27	95345.41	316197.06	331633.20	9.9792998	10.4999578
26	95336.64	315877.44	331328.47	9.9792599	10.4995186
25	95327.86	315558.40	331024.32	9.9792198	10.4990797
24	95319.07	315239.94	330720.76	9.9791798	10.4986412
23	95310.27	314922.07	330417.78	9.9791397	10.4982031
22	95301.46	314604.78	330115.39	9.9790996	10.4977653
21	95292.64	314288.07	329813.57	9.9790594	10.4973279
20	95283.82	313971.94	329512.34	9.9790192	10.4968908
19	95274.99	313656.39	329211.68	9.9789789	10.4964541
18	95266.15	313341.41	328911.60	9.9789386	10.4960178
17	95257.30	313027.01	328612.09	9.9788983	10.4955818
16	95248.44	312713.17	328313.16	9.9788579	10.4951462
15	95239.58	312399.91	328014.79	9.9788175	10.4947109
14	95230.71	312087.22	327717.00	9.9787770	10.4942760
13	95221.83	311775.09	327419.77	9.9787365	10.4938414
12	95212.94	311463.53	327123.11	9.9786960	10.4934072
11	95204.04	311152.54	326827.02	9.9786554	10.4929733
10	95195.14	310842.10	326531.49	9.9786148	10.4925398
9	95186.23	310532.23	326236.52	9.9785741	10.4921067
8	95177.31	310222.91	325942.11	9.9785334	10.4916739
7	95168.38	309914.16	325648.25	9.9784927	10.4912414
6	95159.44	309605.96	325354.96	9.9784519	10.4908093
5	95150.50	309298.31	325062.22	9.9784111	10.4903776
4	95141.54	308991.22	324770.03	9.9783702	10.4899461
3	95132.58	308684.68	324478.40	9.9783293	10.4895151
2	95123.61	308378.69	324187.32	9.9782883	10.4890844
1	95114.63	308073.25	323896.78	9.9782474	10.4886540
0	95105.65	307768.35	323606.80	9.9782063	10.4882240

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18 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	30901.70	32491.97	105146.22	9.4899824	9.5117760
1	30929.36	32524.13	105156.17	9.4903710	9.5122057
2	30957.02	32556.30	105166.12	9.4907592	9.5126351
3	30984.68	32588.48	105176.08	9.4911471	9.5130641
4	31012.34	32620.66	105186.06	9.4915345	9.5134927
5	31039.99	32652.85	105196.05	9.4919216	9.5139210
6	31067.64	32685.04	105206.04	9.4923083	9.5143490
7	31095.29	32717.24	105216.05	9.4926946	9.5147766
8	31122.94	32749.44	105226.07	9.4930806	9.5152039
9	31150.58	32781.65	105236.10	9.4934661	9.5156309
10	31178.22	32813.87	105246.14	9.4938513	9.5160575
11	31205.86	32846.10	105256.19	9.4942361	9.5164838
12	31233.49	32878.33	105266.25	9.4946205	9.5169097
13	31261.12	32910.56	105276.33	9.4950046	9.5173353
14	31288.75	32942.80	105286.41	9.4953883	9.5177606
15	31316.38	32975.05	105296.51	9.4957716	9.5181855
16	31344.00	33007.31	105306.61	9.4961545	9.5186101
17	31371.63	33039.57	105316.73	9.4965370	9.5190344
18	31399.25	33071.84	105326.86	9.4969192	9.5194583
19	31426.86	33104.11	105336.99	9.4973010	9.5198819
20	31454.48	33136.39	105347.14	9.4976824	9.5203052
21	31482.09	33168.68	105357.30	9.4980635	9.5207282
22	31509.69	33200.97	105367.47	9.4984442	9.5211508
23	31537.30	33233.27	105377.65	9.4988245	9.5215730
24	31564.90	33265.57	105387.85	9.4992045	9.5219950
25	31592.50	33297.88	105398.05	9.4995840	9.5224166
26	31620.10	33330.20	105408.26	9.4999633	9.5228379
27	31647.70	33362.52	105418.49	9.5003421	9.5232589
28	31675.29	33394.85	105428.73	9.5007206	9.5236795
29	31702.88	33427.19	105438.97	9.5010987	9.5240999
30	31730.47	33459.53	105449.23	9.5014764	9.5245199

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71 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	95105.65	307768.35	323606.80	9.9782063	10.4882240
59	95096.66	307464.00	323317.36	9.9781653	10.4877943
58	95087.66	307160.20	323028.46	9.9781241	10.4873649
57	95078.65	306856.93	322740.11	9.9780830	10.4869359
56	95069.63	306554.21	322452.30	9.9780418	10.4865073
55	95060.61	306252.03	322165.03	9.9780006	10.4860790
54	95051.57	305950.38	321878.30	9.9779593	10.4856510
53	95042.53	305649.28	321592.10	9.9779180	10.4852234
52	95033.48	305348.70	321306.44	9.9778766	10.4847961
51	95024.42	305048.66	321021.32	9.9778353	10.4843691
50	95015.36	304749.15	320736.73	9.9777938	10.4839425
49	95006.29	304450.18	320452.66	9.9777523	10.4835162
48	94997.21	304151.73	320169.13	9.9777108	10.4830903
47	94988.12	303853.81	319886.13	9.9776693	10.4826647
46	94979.02	303556.41	319603.65	9.9776277	10.4822394
45	94969.91	303259.54	319321.70	9.9775860	10.4818145
44	94960.80	302963.20	319040.28	9.9775444	10.4813899
43	94951.68	302667.37	318759.37	9.9775026	10.4809656
42	94942.55	302372.07	318478.99	9.9774609	10.4805417
41	94933.41	302077.28	318199.13	9.9774191	10.4801181
40	94924.26	301783.01	317919.78	9.9773772	10.4796948
39	94915.11	301489.26	317640.95	9.9773354	10.4792718
38	94905.95	301196.02	317362.64	9.9772934	10.4788492
37	94896.78	300903.30	317084.84	9.9772515	10.4784270
36	94887.60	300611.09	316807.56	9.9772095	10.4780050
35	94878.42	300319.39	316530.78	9.9771674	10.4775834
34	94869.22	300028.20	316254.52	9.9771253	10.4771621
33	94860.02	299737.51	315978.76	9.9770832	10.4767411
32	94850.81	299447.34	315703.51	9.9770410	10.4763205
31	94841.59	299157.66	315428.77	9.9769988	10.4759001
30	94832.37	298868.50	315154.53	9.9769566	10.4754801

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18 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	31730.47	33459.53	105449.23	9.5014764	9.5245199
31	31758.05	33491.88	105459.50	9.5018538	9.5249395
32	31785.63	33524.24	105469.78	9.5022308	9.5253589
33	31813.21	33556.60	105480.07	9.5026075	9.5257779
34	31840.79	33588.97	105490.37	9.5029838	9.5261966
35	31868.36	33621.34	105500.68	9.5033597	9.5266150
36	31895.93	33653.72	105511.01	9.5037353	9.5270331
37	31923.50	33686.11	105521.34	9.5041105	9.5274508
38	31951.06	33718.50	105531.69	9.5044853	9.5278682
39	31978.63	33750.90	105542.04	9.5048598	9.5282853
40	32006.19	33783.30	105552.41	9.5052339	9.5287021
41	32033.74	33815.71	105562.79	9.5056077	9.5291186
42	32061.30	33848.13	105573.18	9.5059811	9.5295347
43	32088.85	33880.56	105583.58	9.5063542	9.5299505
44	32116.40	33912.99	105593.99	9.5067269	9.5303661
45	32143.95	33945.43	105604.41	9.5070992	9.5307813
46	32171.49	33977.87	105614.85	9.5074712	9.5311961
47	32199.03	34010.32	105625.29	9.5078428	9.5316107
48	32226.57	34042.78	105635.75	9.5082141	9.5320250
49	32254.11	34075.24	105646.21	9.5085850	9.5324389
50	32281.64	34107.71	105656.69	9.5089556	9.5328526
51	32309.17	34140.19	105667.18	9.5093258	9.5332659
52	32336.70	34172.67	105677.68	9.5096956	9.5336789
53	32364.22	34205.16	105688.19	9.5100651	9.5340916
54	32391.74	34237.65	105698.71	9.5104343	9.5345040
55	32419.26	34270.15	105709.24	9.5108031	9.5349161
56	32446.78	34302.66	105719.78	9.5111716	9.5353278
57	32474.29	34335.18	105730.34	9.5115397	9.5357393
58	32501.80	34367.70	105740.90	9.5119074	9.5361505
59	32529.31	34400.23	105751.48	9.5122749	9.5365613
60	32556.82	34432.76	105762.07	9.5126419	9.5369719

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71 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	94832.36	298868.50	315154.53	9.9769566	10.4754801
29	94823.13	298579.83	314880.79	9.9769143	10.4750605
28	94813.89	298291.66	314607.56	9.9768720	10.4746411
27	94804.64	298004.00	314334.83	9.9768296	10.4742221
26	94795.38	297716.83	314062.59	9.9767872	10.4738034
25	94786.12	297430.16	313790.86	9.9767447	10.4733850
24	94776.84	297143.99	313519.62	9.9767022	10.4729669
23	94767.56	296858.31	313248.87	9.9766597	10.4725492
22	94758.27	296573.12	312978.62	9.9766171	10.4721318
21	94748.97	296288.42	312708.86	9.9765745	10.4717147
20	94739.66	296004.22	312439.59	9.9765318	10.4712979
19	94730.35	295720.50	312170.81	9.9764891	10.4708814
18	94721.03	295437.27	311902.52	9.9764464	10.4704653
17	94711.70	295154.53	311634.72	9.9764036	10.4700495
16	94702.36	294872.27	311367.40	9.9763608	10.4696339
15	94693.01	294590.50	311100.57	9.9763179	10.4692187
14	94683.66	294309.21	310834.22	9.9762750	10.4688039
13	94674.30	294028.40	310568.35	9.9762321	10.4683893
12	94664.93	293748.07	310302.96	9.9761891	10.4679750
11	94655.55	293468.22	310038.05	9.9761461	10.4675611
10	94646.16	293188.85	309773.63	9.9761030	10.4671474
9	94636.77	292909.95	309509.67	9.9760599	10.4667341
8	94627.36	292631.52	309246.20	9.9760167	10.4663211
7	94617.95	292353.58	308983.19	9.9759736	10.4659084
6	94608.54	292076.10	308720.66	9.9759303	10.4654960
5	94599.10	291799.09	308458.60	9.9758870	10.4650839
4	94589.68	291522.56	308197.02	9.9758437	10.4646722
3	94580.23	291246.49	307935.90	9.9758004	10.4642607
2	94570.78	290970.89	307675.25	9.9757570	10.4638495
1	94561.32	290695.76	307415.07	9.9757135	10.4634387
0	94551.86	290421.09	307155.35	9.9756701	10.4630281

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19 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	32556.82	34432.76	105762.07	9.5126419	9.5369719
1	32584.32	34465.30	105772.67	9.5130086	9.5373821
2	32611.82	34497.85	105783.28	9.5133750	9.5377920
3	32639.32	34530.40	105793.90	9.5137410	9.5382017
4	32666.81	34562.96	105804.53	9.5141067	9.5386110
5	32694.30	34595.53	105815.17	9.5144721	9.5390200
6	32721.79	34628.10	105825.83	9.5148371	9.5394287
7	32749.28	34660.68	105836.49	9.5152017	9.5398371
8	32776.76	34693.27	105847.17	9.5155660	9.5402453
9	32804.24	34725.86	105857.86	9.5159300	9.5406531
10	32831.72	34758.46	105868.55	9.5162936	9.5410606
11	32859.19	34791.07	105879.26	9.5166569	9.5414678
12	32886.66	34823.68	105889.99	9.5170198	9.5418747
13	32914.13	34856.30	105900.72	9.5173824	9.5422813
14	32941.60	34888.93	105911.46	9.5177447	9.5426877
15	32969.06	34921.56	105922.21	9.5181066	9.5430937
16	32996.53	34954.20	105932.98	9.5184682	9.5434994
17	33023.98	34986.85	105943.76	9.5188295	9.5439048
18	33051.44	35019.50	105954.54	9.5191904	9.5443100
19	33078.89	35052.16	105965.34	9.5195510	9.5447148
20	33106.34	35084.83	105976.15	9.5199112	9.5451193
21	33133.79	35117.50	105986.97	9.5202711	9.5455236
22	33161.23	35150.18	105997.81	9.5206307	9.5459276
23	33188.67	35182.87	106008.65	9.5209899	9.5463312
24	33216.11	35215.56	106019.51	9.5213488	9.5467346
25	33243.55	35248.26	106030.37	9.5217074	9.5471377
26	33270.98	35280.97	106041.25	9.5220656	9.5475405
27	33298.41	35313.68	106052.14	9.5224235	9.5479430
28	33325.84	35346.40	106063.04	9.5227811	9.5483452
29	33353.26	35379.12	106073.95	9.5231383	9.5487471
30	33380.69	35411.86	106084.87	9.5234953	9.5491487

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70 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	94551.86	290421.09	307155.35	9.9756701	10.4630281
59	94542.38	290146.88	306896.10	9.9756265	10.4626179
58	94532.90	289873.14	306637.31	9.9755830	10.4622080
57	94523.41	289599.86	306378.98	9.9755394	10.4617983
56	94513.91	289327.04	306121.11	9.9754957	10.4613890
55	94504.41	289054.67	305863.70	9.9754521	10.4609800
54	94494.89	288782.77	305606.75	9.9754083	10.4605713
53	94485.37	288511.32	305350.26	9.9753646	10.4601629
52	94475.84	288240.33	305094.23	9.9753208	10.4597547
51	94466.30	287969.79	304838.64	9.9752769	10.4593469
50	94456.75	287699.70	304583.52	9.9752330	10.4589394
49	94447.20	287430.07	304328.84	9.9751891	10.4585322
48	94437.64	287160.88	304074.62	9.9751451	10.4581253
47	94428.07	286892.15	303820.84	9.9751011	10.4577187
46	94418.49	286623.86	303567.52	9.9750570	10.4573123
45	94408.90	286356.02	303314.64	9.9750129	10.4569063
44	94399.31	286088.63	303062.21	9.9749688	10.4565006
43	94389.71	285821.68	302810.23	9.9749246	10.4560952
42	94380.10	285555.17	302558.68	9.9748804	10.4556900
41	94370.48	285289.11	302307.59	9.9748361	10.4552852
40	94360.85	285023.49	302056.93	9.9747918	10.4548807
39	94351.22	284758.31	301806.72	9.9747475	10.4544764
38	94341.57	284493.56	301556.94	9.9747031	10.4540724
37	94331.92	284229.26	301307.60	9.9746587	10.4536688
36	94322.27	283965.39	301058.70	9.9746142	10.4532654
35	94312.60	283701.96	300810.24	9.9745697	10.4528623
34	94302.93	283438.96	300562.21	9.9745252	10.4524595
33	94293.24	283176.39	300314.62	9.9744806	10.4520570
32	94283.55	282914.26	300067.46	9.9744359	10.4516548
31	94273.86	282652.56	299820.73	9.9743913	10.4512529
30	94264.15	282391.29	299574.43	9.9743466	10.4508513

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19 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	33380.69	35411.86	106084.87	9.5234953	9.5491487
31	33408.10	35444.60	106095.80	9.5238518	9.5495500
32	33435.52	35477.34	106106.75	9.5242081	9.5499511
33	33462.93	35510.10	106117.70	9.5245640	9.5503519
34	33490.34	35542.86	106128.67	9.5249196	9.5507523
35	33517.75	35575.63	106139.65	9.5252749	9.5511525
36	33545.16	35608.40	106150.64	9.5256298	9.5515524
37	33572.56	35641.18	106161.64	9.5259844	9.5519521
38	33599.96	35673.97	106172.65	9.5263387	9.5523514
39	33627.35	35706.76	106183.67	9.5266927	9.5527504
40	33654.75	35739.56	106194.71	9.5270463	9.5531492
41	33682.14	35772.37	106205.75	9.5273997	9.5535477
42	33709.53	35805.18	106216.81	9.5277526	9.5539459
43	33736.91	35838.00	106227.88	9.5281053	9.5543438
44	33764.29	35870.83	106238.96	9.5284577	9.5547415
45	33791.67	35903.67	106250.05	9.5288097	9.5551388
46	33819.05	35936.51	106261.15	9.5291614	9.5555359
47	33846.42	35969.36	106272.27	9.5295128	9.5559327
48	33873.79	36002.22	106283.39	9.5298638	9.5563292
49	33901.16	36035.08	106294.53	9.5302146	9.5567255
50	33928.52	36067.95	106305.68	9.5305650	9.5571214
51	33955.89	36100.82	106316.84	9.5309151	9.5575171
52	33983.25	36133.71	106328.01	9.5312649	9.5579125
53	34010.60	36166.60	106339.19	9.5316143	9.5583077
54	34037.96	36199.50	106350.38	9.5319635	9.5587025
55	34065.31	36232.40	106361.58	9.5323123	9.5590971
56	34092.65	36265.31	106372.80	9.5326608	9.5594914
57	34120.00	36298.23	106384.03	9.5330090	9.5598854
58	34147.34	36331.15	106395.27	9.5333569	9.5602792
59	34174.68	36364.08	106406.52	9.5337044	9.5606727
60	34202.01	36397.02	106417.78	9.5340517	9.5610659

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70 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	94264.15	282391.29	299574.43	9.9743466	10.4508513
29	94254.43	282130.45	299328.56	9.9743018	10.4504500
28	94244.71	281870.03	299083.12	9.9742570	10.4500489
27	94234.98	281610.04	298838.11	9.9742122	10.4496481
26	94225.24	281350.48	298593.52	9.9741673	10.4492477
25	94215.50	281091.34	298349.36	9.9741224	10.4488475
24	94205.75	280832.63	298105.63	9.9740774	10.4484476
23	94195.99	280574.33	297862.31	9.9740324	10.4480479
22	94186.22	280316.46	297619.42	9.9739873	10.4476486
21	94176.44	280059.01	297376.95	9.9739422	10.4472496
20	94166.65	279801.98	297134.90	9.9738971	10.4468508
19	94156.85	279545.37	296893.27	9.9738519	10.4464523
18	94147.05	279289.17	296652.05	9.9738067	10.4460541
17	94137.24	279033.39	296411.25	9.9737615	10.4456562
16	94127.42	278778.02	296170.87	9.9737162	10.4452585
15	94117.60	278523.07	295930.90	9.9736709	10.4448612
14	94107.77	278268.53	295691.35	9.9736255	10.4444641
13	94097.93	278014.40	295452.21	9.9735801	10.4440673
12	94088.08	277760.69	295213.48	9.9735346	10.4436708
11	94078.22	277507.38	294975.16	9.9734891	10.4432745
10	94068.35	277254.48	294737.25	9.9734435	10.4428786
9	94058.48	277001.99	294499.75	9.9733980	10.4424829
8	94048.60	276749.90	294262.65	9.9733523	10.4420875
7	94038.71	276498.22	294025.97	9.9733067	10.4416923
6	94028.81	276246.95	293789.68	9.9732610	10.4412975
5	94018.90	275996.08	293553.80	9.9732152	10.4409029
4	94008.99	275745.61	293318.33	9.9731694	10.4405086
3	93999.07	275495.54	293083.26	9.9731236	10.4401146
2	93989.14	275245.88	292848.58	9.9730777	10.4397208
1	93979.20	274996.61	292614.31	9.9730318	10.4393273
0	93969.26	274747.74	292380.44	9.9729858	10.4389341

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20 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	34202.01	36397.02	106417.78	9.5340517	9.5610659
1	34229.35	36429.97	106429.05	9.5343986	9.5614588
2	34256.68	36462.92	106440.33	9.5347452	9.5618515
3	34284.01	36495.88	106451.63	9.5350915	9.5622439
4	34311.33	36528.85	106462.94	9.5354375	9.5626360
5	34338.65	36561.82	106474.26	9.5357832	9.5630278
6	34365.97	36594.80	106485.59	9.5361286	9.5634194
7	34393.29	36627.79	106496.93	9.5364737	9.5638107
8	34420.60	36660.79	106508.28	9.5368184	9.5642018
9	34447.91	36693.79	106519.64	9.5371629	9.5645925
10	34475.22	36726.80	106531.01	9.5375070	9.5649831
11	34502.52	36759.82	106542.40	9.5378508	9.5653733
12	34529.82	36792.84	106553.80	9.5381943	9.5657633
13	34557.12	36825.87	106565.21	9.5385375	9.5661530
14	34584.42	36858.91	106576.63	9.5388804	9.5665424
15	34611.71	36891.95	106588.07	9.5392230	9.5669316
16	34639.00	36925.00	106599.51	9.5395653	9.5673205
17	34666.29	36958.06	106610.97	9.5399073	9.5677091
18	34693.57	36991.13	106622.43	9.5402489	9.5680975
19	34720.85	37024.20	106633.91	9.5405903	9.5684856
20	34748.13	37057.28	106645.40	9.5409314	9.5688735
21	34775.40	37090.37	106656.90	9.5412721	9.5692611
22	34802.67	37123.46	106668.42	9.5416126	9.5696484
23	34829.94	37156.56	106679.94	9.5419527	9.5700355
24	34857.21	37189.67	106691.48	9.5422926	9.5704223
25	34884.47	37222.78	106703.02	9.5426321	9.5708088
26	34911.73	37255.90	106714.58	9.5429713	9.5711951
27	34938.99	37289.03	106726.15	9.5433103	9.5715811
28	34966.24	37322.17	106737.74	9.5436489	9.5719669
29	34993.49	37355.32	106749.34	9.5439873	9.5723524
30	35020.74	37388.47	106760.94	9.5443253	9.5727377

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69 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	93969.26	274747.74	292380.44	9.9729858	10.4389341
59	93959.31	274499.27	292146.97	9.9729398	10.4385412
58	93949.35	274251.20	291913.89	9.9728938	10.4381485
57	93939.38	274003.52	291681.21	9.9728477	10.4377561
56	93929.40	273756.23	291448.92	9.9728016	10.4373640
55	93919.42	273509.34	291217.03	9.9727554	10.4369722
54	93909.43	273262.84	290985.53	9.9727092	10.4365806
53	93899.42	273016.74	290754.43	9.9726629	10.4361893
52	93889.42	272771.02	290523.72	9.9726166	10.4357982
51	93879.40	272525.69	290293.39	9.9725703	10.4354075
50	93869.37	272280.75	290063.46	9.9725239	10.4350169
49	93859.34	272036.20	289833.91	9.9724775	10.4346267
48	93849.30	271792.04	289604.75	9.9724310	10.4342367
47	93839.25	271548.26	289375.98	9.9723845	10.4338470
46	93829.19	271304.87	289147.60	9.9723380	10.4334576
45	93819.13	271061.86	288919.59	9.9722914	10.4330684
44	93809.06	270819.23	288691.98	9.9722448	10.4326795
43	93798.98	270576.99	288464.74	9.9721981	10.4322909
42	93788.89	270335.13	288237.89	9.9721514	10.4319025
41	93778.79	270093.64	288011.42	9.9721047	10.4315144
40	93768.69	269852.54	287785.32	9.9720579	10.4311265
39	93758.58	269611.81	287559.61	9.9720110	10.4307389
38	93748.46	269371.47	287334.28	9.9719642	10.4303516
37	93738.33	269131.49	287109.32	9.9719172	10.4299645
36	93728.19	268891.90	286884.74	9.9718703	10.4295777
35	93718.05	268652.67	286660.53	9.9718233	10.4291912
34	93707.90	268413.83	286436.70	9.9717762	10.4288049
33	93697.74	268175.35	286213.24	9.9717291	10.4284189
32	93687.57	267937.25	285990.15	9.9716820	10.4280331
31	93677.40	267699.51	285767.44	9.9716348	10.4276476
30	93667.22	267462.15	285545.09	9.9715876	10.4272623

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20 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	35020.74	37388.47	106760.94	9.5443253	9.5727377
31	35047.99	37421.63	106772.55	9.5446630	9.5731227
32	35075.23	37454.79	106784.18	9.5450005	9.5735074
33	35102.47	37487.97	106795.82	9.5453376	9.5738919
34	35129.70	37521.15	106807.47	9.5456745	9.5742761
35	35156.93	37554.34	106819.14	9.5460110	9.5746601
36	35184.16	37587.53	106830.81	9.5463472	9.5750438
37	35211.39	37620.73	106842.50	9.5466832	9.5754272
38	35238.62	37653.94	106854.20	9.5470189	9.5758104
39	35265.84	37687.16	106865.91	9.5473542	9.5761934
40	35293.06	37720.38	106877.63	9.5476893	9.5765761
41	35320.27	37753.61	106889.36	9.5480240	9.5769585
42	35347.48	37786.85	106901.10	9.5483585	9.5773407
43	35374.69	37820.10	106912.86	9.5486927	9.5777226
44	35401.90	37853.35	106924.63	9.5490266	9.5781043
45	35429.10	37886.61	106936.41	9.5493602	9.5784858
46	35456.30	37919.88	106948.20	9.5496935	9.5788669
47	35483.50	37953.16	106960.00	9.5500265	9.5792479
48	35510.70	37986.44	106971.82	9.5503592	9.5796286
49	35537.89	38019.73	106983.64	9.5506916	9.5800090
50	35565.08	38053.02	106995.48	9.5510237	9.5803892
51	35592.26	38086.33	107007.33	9.5513556	9.5807691
52	35619.44	38119.64	107019.19	9.5516871	9.5811488
53	35646.62	38152.96	107031.06	9.5520184	9.5815282
54	35673.80	38186.29	107042.95	9.5523494	9.5819074
55	35700.97	38219.62	107054.84	9.5526801	9.5822864
56	35728.14	38252.96	107066.75	9.5530105	9.5826651
57	35755.31	38286.31	107078.67	9.5533406	9.5830435
58	35782.48	38319.67	107090.60	9.5536704	9.5834217
59	35809.64	38353.03	107102.54	9.5539999	9.5837997
60	35836.79	38386.40	107114.50	9.5543292	9.5841774

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69 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	93667.22	267462.15	285545.09	9.9715876	10.4272623
29	93657.03	267225.16	285323.12	9.9715404	10.4268773
28	93646.83	266988.53	285101.52	9.9714931	10.4264926
27	93636.62	266752.27	284880.28	9.9714457	10.4261081
26	93626.40	266516.38	284659.41	9.9713984	10.4257239
25	93616.18	266280.85	284438.91	9.9713509	10.4253399
24	93605.95	266045.69	284218.77	9.9713035	10.4249562
23	93595.71	265810.89	283998.99	9.9712560	10.4245728
22	93585.46	265576.45	283779.58	9.9712084	10.4241896
21	93575.21	265342.38	283560.54	9.9711608	10.4238066
20	93564.95	265108.67	283341.85	9.9711132	10.4234239
19	93554.68	264875.31	283123.53	9.9710655	10.4230415
18	93544.40	264642.32	282905.56	9.9710178	10.4226593
17	93534.11	264409.69	282687.96	9.9709701	10.4222774
16	93523.82	264177.41	282470.71	9.9709223	10.4218957
15	93513.52	263945.49	282253.82	9.9708744	10.4215142
14	93503.21	263713.92	282037.29	9.9708265	10.4211331
13	93492.89	263482.71	281821.11	9.9707786	10.4207521
12	93482.56	263251.86	281605.29	9.9707306	10.4203714
11	93472.23	263021.36	281389.82	9.9706826	10.4199910
10	93461.89	262791.21	281174.71	9.9706346	10.4196108
9	93451.54	262561.41	280959.95	9.9705865	10.4192309
8	93441.18	262331.96	280745.54	9.9705383	10.4188512
7	93430.82	262102.86	280531.48	9.9704902	10.4184718
6	93420.45	261874.11	280317.77	9.9704419	10.4180926
5	93410.07	261645.71	280104.41	9.9703937	10.4177136
4	93399.68	261417.66	279891.40	9.9703454	10.4173349
3	93389.28	261189.95	279678.73	9.9702970	10.4169565
2	93378.87	260962.59	279466.41	9.9702486	10.4165783
1	93368.46	260735.58	279254.44	9.9702002	10.4162003
0	93358.04	260508.91	279042.81	9.9701517	10.4158226

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21 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	35836.79	38386.40	107114.50	9.5543292	9.5841774
1	35863.95	38419.78	107126.47	9.5546581	9.5845549
2	35891.10	38453.17	107138.44	9.5549868	9.5849321
3	35918.25	38486.56	107150.43	9.5553152	9.5853091
4	35945.40	38519.96	107162.44	9.5556433	9.5856859
5	35972.54	38553.37	107174.45	9.5559711	9.5860624
6	35999.68	38586.79	107186.47	9.5562987	9.5864386
7	36026.82	38620.21	107198.51	9.5566259	9.5868147
8	36053.95	38653.64	107210.56	9.5569529	9.5871904
9	36081.08	38687.08	107222.62	9.5572796	9.5875660
10	36108.21	38720.53	107234.69	9.5576060	9.5879413
11	36135.33	38753.98	107246.78	9.5579321	9.5883163
12	36162.46	38787.44	107258.87	9.5582579	9.5886912
13	36189.58	38820.91	107270.98	9.5585835	9.5890657
14	36216.69	38854.39	107283.10	9.5589088	9.5894401
15	36243.80	38887.87	107295.23	9.5592338	9.5898142
16	36270.91	38921.36	107307.37	9.5595585	9.5901881
17	36298.02	38954.86	107319.53	9.5598829	9.5905617
18	36325.12	38988.37	107331.70	9.5602071	9.5909351
19	36352.22	39021.89	107343.88	9.5605310	9.5913082
20	36379.32	39055.41	107356.07	9.5608546	9.5916812
21	36406.41	39088.94	107368.27	9.5611779	9.5920539
22	36433.50	39122.48	107380.48	9.5615010	9.5924263
23	36460.59	39156.02	107392.71	9.5618237	9.5927985
24	36487.68	39189.57	107404.95	9.5621462	9.5931705
25	36514.76	39223.13	107417.20	9.5624685	9.5935423
26	36541.84	39256.70	107429.46	9.5627904	9.5939138
27	36568.92	39290.28	107441.73	9.5631121	9.5942851
28	36595.99	39323.86	107454.02	9.5634335	9.5946561
29	36623.06	39357.45	107466.31	9.5637546	9.5950269
30	36650.12	39391.05	107478.62	9.5640754	9.5953975

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68 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	93358.04	260508.91	279042.81	9.9701517	10.4158226
59	93347.61	260282.58	278831.53	9.9701032	10.4154451
58	93337.17	260056.59	278620.59	9.9700547	10.4150679
57	93326.73	259830.95	278409.99	9.9700061	10.4146909
56	93316.28	259605.64	278199.73	9.9699574	10.4143141
55	93305.82	259380.68	277989.82	9.9699087	10.4139376
54	93295.35	259156.06	277780.24	9.9698600	10.4135614
53	93284.87	258931.77	277571.00	9.9698112	10.4131853
52	93274.39	258707.82	277362.11	9.9697624	10.4128096
51	93263.90	258484.21	277153.55	9.9697136	10.4124340
50	93253.40	258260.94	276945.32	9.9696647	10.4120587
49	93242.89	258038.00	276737.43	9.9696158	10.4116837
48	93232.38	257815.39	276529.88	9.9695668	10.4113088
47	93221.86	257593.12	276322.66	9.9695177	10.4109343
46	93211.33	257371.18	276115.78	9.9694687	10.4105599
45	93200.79	257149.57	275909.23	9.9694196	10.4101858
44	93190.24	256928.30	275703.01	9.9693704	10.4098119
43	93179.68	256707.35	275497.12	9.9693212	10.4094383
42	93169.12	256486.74	275291.57	9.9692720	10.4090649
41	93158.55	256266.45	275086.34	9.9692227	10.4086918
40	93147.97	256046.49	274881.44	9.9691734	10.4083188
39	93137.38	255826.86	274676.87	9.9691240	10.4079461
38	93126.79	255607.56	274472.63	9.9690746	10.4075737
37	93116.19	255388.58	274268.71	9.9690252	10.4072015
36	93105.58	255169.92	274065.12	9.9689757	10.4068295
35	93094.96	254951.60	273861.86	9.9689262	10.4064577
34	93084.33	254733.59	273658.92	9.9688766	10.4060862
33	93073.70	254515.91	273456.30	9.9688270	10.4057149
32	93063.06	254298.55	273254.00	9.9687773	10.4053439
31	93052.41	254081.51	273052.03	9.9687276	10.4049731
30	93041.75	253864.79	272850.38	9.9686779	10.4046025

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21 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	36650.12	39391.05	107478.62	9.5640754	9.5953975
31	36677.19	39424.66	107490.95	9.5643960	9.5957679
32	36704.25	39458.27	107503.28	9.5647163	9.5961380
33	36731.30	39491.89	107515.62	9.5650363	9.5965079
34	36758.36	39525.52	107527.98	9.5653561	9.5968776
35	36785.41	39559.16	107540.35	9.5656756	9.5972470
36	36812.46	39592.80	107552.73	9.5659948	9.5976162
37	36839.50	39626.45	107565.12	9.5663137	9.5979852
38	36866.54	39660.11	107577.52	9.5666324	9.5983540
39	36893.58	39693.78	107589.95	9.5669508	9.5987225
40	36920.62	39727.46	107602.37	9.5672689	9.5990908
41	36947.65	39761.14	107614.81	9.5675868	9.5994588
42	36974.68	39794.83	107627.27	9.5679044	9.5998267
43	37001.70	39828.53	107639.73	9.5682217	9.6001943
44	37028.72	39862.24	107652.21	9.5685387	9.6005617
45	37055.74	39895.96	107664.70	9.5688555	9.6009289
46	37082.76	39929.68	107677.20	9.5691721	9.6012958
47	37109.77	39963.41	107689.71	9.5694883	9.6016625
48	37136.78	39997.15	107702.24	9.5698043	9.6020290
49	37163.79	40030.89	107714.77	9.5701200	9.6023953
50	37190.80	40064.65	107727.32	9.5704355	9.6027613
51	37217.80	40098.41	107739.88	9.5707506	9.6031271
52	37244.80	40132.18	107752.46	9.5710656	9.6034927
53	37271.79	40165.96	107765.04	9.5713802	9.6038581
54	37298.78	40199.75	107777.64	9.5716946	9.6042233
55	37325.77	40233.54	107790.25	9.5720087	9.6045882
56	37352.75	40267.34	107802.87	9.5723226	9.6049529
57	37379.73	40301.15	107815.50	9.5726362	9.6053174
58	37406.71	40334.97	107828.15	9.5729495	9.6056817
59	37433.69	40368.79	107840.80	9.5732626	9.6060457
60	37460.66	40402.62	107853.47	9.5735754	9.6064096

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68 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	93041.75	253864.79	272850.38	9.9686779	10.4046025
29	93031.09	253648.39	272649.05	9.9686281	10.4042321
28	93020.42	253432.31	272448.04	9.9685783	10.4038620
27	93009.74	253216.55	272247.35	9.9685284	10.4034921
26	92999.05	253001.11	272046.98	9.9684785	10.4031224
25	92988.35	252785.98	271846.93	9.9684286	10.4027530
24	92977.65	252571.17	271647.19	9.9683786	10.4023838
23	92966.94	252356.67	271447.77	9.9683285	10.4020148
22	92956.22	252142.49	271248.66	9.9682784	10.4016460
21	92945.49	251928.63	271049.87	9.9682283	10.4012775
20	92934.75	251715.07	270851.39	9.9681781	10.4009092
19	92924.01	251501.83	270653.23	9.9681279	10.4005412
18	92913.26	251288.90	270455.38	9.9680777	10.4001733
17	92902.50	251076.29	270257.84	9.9680274	10.3998057
16	92891.73	250863.98	270060.61	9.9679771	10.3994383
15	92880.95	250651.98	269863.70	9.9679267	10.3990711
14	92870.17	250440.29	269667.09	9.9678763	10.3987042
13	92859.38	250228.91	269470.79	9.9678258	10.3983375
12	92848.58	250017.84	269274.80	9.9677753	10.3979710
11	92837.77	249807.07	269079.12	9.9677247	10.3976047
10	92826.96	249596.61	268883.74	9.9676741	10.3972387
9	92816.14	249386.45	268688.67	9.9676235	10.3968729
8	92805.31	249176.60	268493.91	9.9675728	10.3965073
7	92794.47	248967.06	268299.45	9.9675221	10.3961419
6	92783.62	248757.81	268105.30	9.9674713	10.3957767
5	92772.77	248548.87	267911.45	9.9674205	10.3954118
4	92761.91	248340.23	267717.90	9.9673697	10.3950471
3	92751.04	248131.90	267524.65	9.9673188	10.3946826
2	92740.16	247923.86	267331.70	9.9672679	10.3943183
1	92729.28	247716.12	267139.06	9.9672169	10.3939543
0	92718.39	247508.69	266946.72	9.9671659	10.3935904

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22 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	37460.66	40402.62	107853.47	9.5735754	9.6064096
1	37487.63	40436.46	107866.16	9.5738880	9.6067732
2	37514.59	40470.31	107878.85	9.5742003	9.6071366
3	37541.56	40504.17	107891.56	9.5745123	9.6074997
4	37568.52	40538.04	107904.27	9.5748240	9.6078627
5	37595.47	40571.91	107917.00	9.5751356	9.6082254
6	37622.43	40605.79	107929.75	9.5754468	9.6085880
7	37649.38	40639.68	107942.50	9.5757578	9.6089503
8	37676.32	40673.58	107955.27	9.5760685	9.6093124
9	37703.27	40707.48	107968.05	9.5763790	9.6096742
10	37730.21	40741.39	107980.84	9.5766892	9.6100359
11	37757.14	40775.31	107993.64	9.5769991	9.6103973
12	37784.08	40809.24	108006.46	9.5773088	9.6107586
13	37811.01	40843.18	108019.28	9.5776183	9.6111196
14	37837.94	40877.13	108032.12	9.5779275	9.6114804
15	37864.86	40911.08	108044.97	9.5782364	9.6118409
16	37891.78	40945.04	108057.84	9.5785450	9.6122013
17	37918.70	40979.01	108070.71	9.5788535	9.6125615
18	37945.62	41012.99	108083.60	9.5791616	9.6129214
19	37972.53	41046.97	108096.50	9.5794695	9.6132812
20	37999.44	41080.97	108109.42	9.5797772	9.6136407
21	38026.34	41114.97	108122.34	9.5800845	9.6140000
22	38053.24	41148.98	108135.28	9.5803917	9.6143591
23	38080.14	41183.00	108148.23	9.5806986	9.6147180
24	38107.04	41217.03	108161.19	9.5810052	9.6150766
25	38133.93	41251.06	108174.17	9.5813116	9.6154351
26	38160.82	41285.10	108187.15	9.5816177	9.6157934
27	38187.70	41319.15	108200.15	9.5819236	9.6161514
28	38214.59	41353.21	108213.16	9.5822292	9.6165093
29	38241.47	41387.28	108226.18	9.5825345	9.6168669
30	38268.34	41421.36	108239.22	9.5828397	9.6172243

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67 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	92718.39	247508.69	266946.72	9.9671659	10.3935904
59	92707.49	247301.55	266754.67	9.9671148	10.3932268
58	92696.58	247094.70	266562.92	9.9670637	10.3928634
57	92685.66	246888.16	266371.48	9.9670125	10.3925003
56	92674.73	246681.91	266180.33	9.9669614	10.3921373
55	92663.80	246475.96	265989.47	9.9669101	10.3917746
54	92652.86	246270.30	265798.91	9.9668588	10.3914120
53	92641.91	246064.94	265608.65	9.9668075	10.3910497
52	92630.96	245859.87	265418.68	9.9667562	10.3906876
51	92620.00	245655.09	265229.01	9.9667048	10.3903258
50	92609.03	245450.61	265039.62	9.9666533	10.3899641
49	92598.05	245246.42	264850.54	9.9666018	10.3896027
48	92587.06	245042.52	264661.74	9.9665503	10.3892414
47	92576.06	244838.91	264473.23	9.9664987	10.3888804
46	92565.06	244635.59	264285.02	9.9664471	10.3885196
45	92554.05	244432.56	264097.09	9.9663954	10.3881591
44	92543.03	244229.82	263909.46	9.9663437	10.3877987
43	92532.00	244027.36	263722.11	9.9662920	10.3874385
42	92520.97	243825.19	263535.05	9.9662402	10.3870786
41	92509.93	243623.31	263348.28	9.9661884	10.3867188
40	92498.88	243421.72	263161.80	9.9661365	10.3863593
39	92487.82	243220.41	262975.60	9.9660846	10.3860000
38	92476.75	243019.38	262789.69	9.9660326	10.3856409
37	92465.68	242818.64	262604.06	9.9659806	10.3852820
36	92454.60	242618.19	262418.72	9.9659285	10.3849234
35	92443.51	242418.01	262233.66	9.9658764	10.3845649
34	92432.41	242218.12	262048.88	9.9658243	10.3842066
33	92421.31	242018.51	261864.39	9.9657721	10.3838486
32	92410.20	241819.18	261680.18	9.9657199	10.3834907
31	92399.08	241620.13	261496.24	9.9656677	10.3831331
30	92387.95	241421.36	261312.59	9.9656153	10.3827757

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22 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	38268.34	41421.36	108239.22	9.5828397	9.6172243
31	38295.22	41455.44	108252.27	9.5831445	9.6175815
32	38322.09	41489.53	108265.33	9.5834491	9.6179385
33	38348.95	41523.63	108278.40	9.5837535	9.6182953
34	38375.82	41557.74	108291.49	9.5840576	9.6186519
35	38402.68	41591.86	108304.58	9.5843615	9.6190083
36	38429.53	41625.99	108317.69	9.5846651	9.6193645
37	38456.39	41660.12	108330.81	9.5849685	9.6197205
38	38483.24	41694.26	108343.95	9.5852716	9.6200762
39	38510.08	41728.41	108357.09	9.5855745	9.6204318
40	38536.93	41762.57	108370.25	9.5858771	9.6207872
41	38563.77	41796.74	108383.42	9.5861795	9.6211423
42	38590.60	41830.91	108396.61	9.5864816	9.6214973
43	38617.44	41865.09	108409.80	9.5867835	9.6218520
44	38644.27	41899.28	108423.01	9.5870851	9.6222066
45	38671.10	41933.48	108436.23	9.5873865	9.6225609
46	38697.92	41967.69	108449.47	9.5876876	9.6229150
47	38724.74	42001.91	108462.71	9.5879885	9.6232690
48	38751.56	42036.13	108475.97	9.5882892	9.6236227
49	38778.37	42070.36	108489.24	9.5885896	9.6239763
50	38805.18	42104.60	108502.52	9.5888897	9.6243296
51	38831.99	42138.85	108515.82	9.5891897	9.6246827
52	38858.80	42173.11	108529.13	9.5894893	9.6250356
53	38885.60	42207.38	108542.45	9.5897888	9.6253884
54	38912.39	42241.66	108555.78	9.5900880	9.6257409
55	38939.19	42275.94	108569.12	9.5903869	9.6260932
56	38965.98	42310.23	108582.48	9.5906856	9.6264454
57	38992.77	42344.53	108595.85	9.5909841	9.6267973
58	39019.55	42378.84	108609.24	9.5912823	9.6271491
59	39046.33	42413.16	108622.63	9.5915803	9.6275006
60	39073.11	42447.49	108636.04	9.5918780	9.6278519

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67 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	92387.95	241421.36	261312.59	9.9656153	10.3827757
29	92376.81	241222.86	261129.22	9.9655630	10.3824185
28	92365.67	241024.65	260946.13	9.9655106	10.3820615
27	92354.52	240826.72	260763.32	9.9654582	10.3817047
26	92343.36	240629.06	260580.78	9.9654057	10.3813481
25	92332.20	240431.68	260398.52	9.9653532	10.3809917
24	92321.02	240234.57	260216.54	9.9653006	10.3806355
23	92309.84	240037.74	260034.84	9.9652480	10.3802795
22	92298.65	239841.18	259853.41	9.9651953	10.3799238
21	92287.45	239644.90	259672.25	9.9651426	10.3795682
20	92276.24	239448.89	259491.37	9.9650899	10.3792128
19	92265.03	239253.16	259310.77	9.9650371	10.3788577
18	92253.81	239057.69	259130.43	9.9649843	10.3785027
17	92242.58	238862.50	258950.37	9.9649314	10.3781480
16	92231.34	238667.58	258770.58	9.9648785	10.3777934
15	92220.09	238472.93	258591.07	9.9648256	10.3774391
14	92208.84	238278.55	258411.82	9.9647726	10.3770850
13	92197.58	238084.44	258232.84	9.9647195	10.3767310
12	92186.31	237890.60	258054.14	9.9646665	10.3763773
11	92175.03	237697.03	257875.70	9.9646133	10.3760237
10	92163.75	237503.72	257697.53	9.9645602	10.3756704
9	92152.46	237310.68	257519.63	9.9645069	10.3753173
8	92141.16	237117.91	257341.99	9.9644537	10.3749644
7	92129.85	236925.40	257164.62	9.9644004	10.3746116
6	92118.54	236733.16	256987.52	9.9643470	10.3742591
5	92107.22	236541.18	256810.69	9.9642937	10.3739068
4	92095.89	236349.46	256634.12	9.9642402	10.3735546
3	92084.55	236158.01	256457.81	9.9641868	10.3732027
2	92073.20	235966.83	256281.76	9.9641332	10.3728509
1	92061.85	235775.90	256105.99	9.9640797	10.3724994
0	92050.49	235585.24	255930.47	9.9640261	10.3721481

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23 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	39073.11	42447.49	108636.04	9.5918780	9.6278519
1	39099.89	42481.82	108649.46	9.5921755	9.6282031
2	39126.66	42516.16	108662.89	9.5924728	9.6285540
3	39153.43	42550.51	108676.34	9.5927698	9.6289048
4	39180.19	42584.87	108689.79	9.5930666	9.6292553
5	39206.95	42619.24	108703.26	9.5933631	9.6296057
6	39233.71	42653.62	108716.75	9.5936594	9.6299558
7	39260.47	42688.00	108730.24	9.5939555	9.6303058
8	39287.22	42722.39	108743.75	9.5942513	9.6306556
9	39313.97	42756.79	108757.27	9.5945469	9.6310052
10	39340.71	42791.20	108770.80	9.5948422	9.6313545
11	39367.45	42825.62	108784.35	9.5951373	9.6317037
12	39394.19	42860.05	108797.91	9.5954322	9.6320527
13	39420.93	42894.49	108811.48	9.5957268	9.6324015
14	39447.66	42928.94	108825.06	9.5960212	9.6327501
15	39474.39	42963.39	108838.66	9.5963154	9.6330985
16	39501.11	42997.85	108852.27	9.5966093	9.6334468
17	39527.83	43032.32	108865.89	9.5969030	9.6337948
18	39554.55	43066.80	108879.52	9.5971965	9.6341426
19	39581.27	43101.29	108893.17	9.5974897	9.6344903
20	39607.98	43135.79	108906.82	9.5977827	9.6348378
21	39634.69	43170.30	108920.50	9.5980754	9.6351850
22	39661.39	43204.81	108934.18	9.5983679	9.6355321
23	39688.09	43239.33	108947.88	9.5986602	9.6358790
24	39714.79	43273.86	108961.59	9.5989523	9.6362257
25	39741.48	43308.40	108975.31	9.5992441	9.6365722
26	39768.17	43342.95	108989.04	9.5995357	9.6369185
27	39794.86	43377.51	109002.79	9.5998270	9.6372646
28	39821.55	43412.08	109016.55	9.6001181	9.6376106
29	39848.23	43446.66	109030.32	9.6004090	9.6379563
30	39874.91	43481.24	109044.11	9.6006997	9.6383019

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66 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	92050.49	235585.24	255930.47	9.9640261	10.3721481
59	92039.12	235394.83	255755.21	9.9639724	10.3717969
58	92027.74	235204.69	255580.22	9.9639187	10.3714460
57	92016.35	235014.81	255405.47	9.9638650	10.3710952
56	92004.96	234825.19	255231.01	9.9638112	10.3707447
55	91993.56	234635.82	255056.80	9.9637574	10.3703943
54	91982.15	234446.72	254882.84	9.9637036	10.3700442
53	91970.73	234257.87	254709.15	9.9636496	10.3696942
52	91959.31	234069.28	254535.71	9.9635957	10.3693444
51	91947.88	233880.95	254362.53	9.9635417	10.3689948
50	91936.44	233692.87	254189.61	9.9634877	10.3686455
49	91924.99	233505.05	254016.94	9.9634336	10.3682963
48	91913.53	233317.48	253844.53	9.9633795	10.3679473
47	91902.07	233130.17	253672.38	9.9633253	10.3675985
46	91890.60	232943.11	253500.48	9.9632711	10.3672499
45	91879.12	232756.30	253328.83	9.9632168	10.3669015
44	91867.63	232569.75	253157.44	9.9631625	10.3665532
43	91856.14	232383.45	252986.30	9.9631082	10.3662052
42	91844.64	232197.40	252815.41	9.9630538	10.3658574
41	91833.13	232011.60	252644.78	9.9629994	10.3655097
40	91821.61	231826.06	252474.40	9.9629449	10.3651622
39	91810.08	231640.76	252304.26	9.9628904	10.3648150
38	91798.55	231455.71	252134.38	9.9628358	10.3644679
37	91787.01	231270.91	251964.75	9.9627812	10.3641210
36	91775.46	231086.36	251795.37	9.9627266	10.3637743
35	91763.90	230902.06	251626.24	9.9626719	10.3634278
34	91752.34	230718.01	251457.35	9.9626172	10.3630815
33	91740.77	230534.20	251288.71	9.9625624	10.3627354
32	91729.19	230350.64	251120.32	9.9625076	10.3623894
31	91717.60	230167.32	250952.18	9.9624527	10.3620437
30	91706.01	229984.25	250784.28	9.9623978	10.3616981

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23 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	39874.91	43481.24	109044.11	9.6006997	9.6383019
31	39901.58	43515.83	109057.91	9.6009901	9.6386473
32	39928.25	43550.43	109071.72	9.6012803	9.6389925
33	39954.92	43585.04	109085.54	9.6015703	9.6393375
34	39981.58	43619.66	109099.38	9.6018600	9.6396823
35	40008.24	43654.29	109113.23	9.6021495	9.6400269
36	40034.90	43688.93	109127.09	9.6024388	9.6403714
37	40061.56	43723.58	109140.97	9.6027278	9.6407156
38	40088.21	43758.23	109154.86	9.6030166	9.6410597
39	40114.86	43792.89	109168.76	9.6033052	9.6414036
40	40141.50	43827.58	109182.67	9.6035936	9.6417473
41	40168.14	43862.24	109196.59	9.6038817	9.6420908
42	40194.78	43896.93	109210.53	9.6041696	9.6424342
43	40221.41	43931.63	109224.48	9.6044573	9.6427773
44	40248.04	43966.34	109238.45	9.6047448	9.6431203
45	40274.67	44001.06	109252.43	9.6050320	9.6434631
46	40301.29	44035.78	109266.42	9.6053190	9.6438057
47	40327.91	44070.51	109280.42	9.6056057	9.6441481
48	40354.53	44105.25	109294.44	9.6058923	9.6444903
49	40381.14	44140.00	109308.47	9.6061786	9.6448324
50	40407.75	44174.76	109322.51	9.6064647	9.6451743
51	40434.36	44209.53	109336.56	9.6067506	9.6455160
52	40460.96	44244.31	109350.63	9.6070362	9.6458575
53	40487.56	44279.10	109364.71	9.6073216	9.6461988
54	40514.16	44313.90	109378.80	9.6076068	9.6465400
55	40540.75	44348.71	109392.91	9.6078918	9.6468810
56	40567.34	44383.53	109407.03	9.6081765	9.6472217
57	40593.93	44418.35	109421.16	9.6084611	9.6475624
58	40620.51	44453.18	109435.30	9.6087454	9.6479028
59	40647.09	44488.02	109449.46	9.6090294	9.6482431
60	40673.66	44522.87	109463.63	9.6093133	9.6485831

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66 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	91706.01	229984.25	250784.28	9.9623978	10.3616981
29	91694.41	229801.43	250616.63	9.9623428	10.3613527
28	91682.80	229618.85	250449.23	9.9622878	10.3610075
27	91671.18	229436.51	250282.07	9.9622328	10.3606625
26	91659.55	229254.42	250115.15	9.9621777	10.3603177
25	91647.91	229072.57	249948.47	9.9621226	10.3599731
24	91636.27	228890.96	249782.04	9.9620674	10.3596286
23	91624.62	228709.59	249615.86	9.9620122	10.3592844
22	91612.97	228528.46	249449.91	9.9619569	10.3589403
21	91601.30	228347.58	249284.21	9.9619016	10.3585964
20	91589.63	228166.93	249118.74	9.9618463	10.3582527
19	91577.95	227986.53	248953.52	9.9617909	10.3579092
18	91566.26	227806.36	248788.54	9.9617355	10.3575658
17	91554.56	227626.43	248623.80	9.9616800	10.3572227
16	91542.86	227446.74	248459.29	9.9616245	10.3568797
15	91531.15	227267.29	248295.03	9.9615689	10.3565369
14	91519.43	227088.07	248131.00	9.9615133	10.3561943
13	91507.70	226909.09	247967.21	9.9614576	10.3558519
12	91495.96	226730.35	247803.66	9.9614020	10.3555097
11	91484.22	226551.84	247640.34	9.9613462	10.3551676
10	91472.47	226373.57	247477.26	9.9612904	10.3548257
9	91460.72	226195.53	247314.42	9.9612346	10.3544840
8	91448.95	226017.73	247151.81	9.9611787	10.3541425
7	91437.18	225840.16	246989.43	9.9611228	10.3538012
6	91425.40	225662.83	246827.29	9.9610668	10.3534600
5	91413.61	225485.72	246665.38	9.9610108	10.3531190
4	91401.81	225308.85	246503.71	9.9609548	10.3527783
3	91390.00	225132.21	246342.27	9.9608987	10.3524376
2	91378.19	224955.80	246181.06	9.9608426	10.3520972
1	91366.37	224779.62	246020.08	9.9607864	10.3517569
0	91354.55	224603.68	245859.33	9.9607302	10.3514169

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24 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	40673.66	44522.87	109463.63	9.6093133	9.6485831
1	40700.24	44557.73	109477.81	9.6095969	9.6489230
2	40726.81	44592.60	109492.01	9.6098803	9.6492628
3	40753.37	44627.48	109506.22	9.6101635	9.6496023
4	40779.93	44662.37	109520.44	9.6104465	9.6499417
5	40806.49	44697.27	109534.67	9.6107293	9.6502809
6	40833.05	44732.17	109548.92	9.6110118	9.6506199
7	40859.60	44767.08	109563.18	9.6112941	9.6509587
8	40886.15	44802.00	109577.46	9.6115762	9.6512974
9	40912.69	44836.93	109591.74	9.6118580	9.6516359
10	40939.23	44871.87	109606.04	9.6121397	9.6519742
11	40965.77	44906.82	109620.36	9.6124211	9.6523123
12	40992.30	44941.78	109634.68	9.6127023	9.6526503
13	41018.83	44976.75	109649.02	9.6129833	9.6529881
14	41045.36	45011.73	109663.37	9.6132641	9.6533257
15	41071.89	45046.72	109677.74	9.6135446	9.6536631
16	41098.41	45081.72	109692.12	9.6138250	9.6540004
17	41124.92	45116.73	109706.51	9.6141051	9.6543375
18	41151.44	45151.74	109720.91	9.6143850	9.6546744
19	41177.95	45186.76	109735.33	9.6146647	9.6550112
20	41204.45	45221.79	109749.76	9.6149441	9.6553477
21	41230.96	45256.83	109764.20	9.6152234	9.6556841
22	41257.45	45291.88	109778.66	9.6155024	9.6560204
23	41283.95	45326.94	109793.13	9.6157812	9.6563564
24	41310.44	45362.01	109807.61	9.6160599	9.6566923
25	41336.93	45397.09	109822.11	9.6163382	9.6570280
26	41363.42	45432.18	109836.62	9.6166164	9.6573636
27	41389.90	45467.28	109851.14	9.6168944	9.6576989
28	41416.38	45502.39	109865.68	9.6171721	9.6580341
29	41442.85	45537.51	109880.23	9.6174496	9.6583692
30	41469.32	45572.63	109894.79	9.6177270	9.6587041

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65 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	91354.55	224603.68	245859.33	9.9607302	10.3514169
59	91342.71	224427.96	245698.82	9.9606739	10.3510770
58	91330.87	224252.47	245538.53	9.9606176	10.3507372
57	91319.02	224077.21	245378.48	9.9605612	10.3503977
56	91307.16	223902.18	245218.65	9.9605048	10.3500583
55	91295.29	223727.38	245059.05	9.9604484	10.3497191
54	91283.42	223552.80	244899.68	9.9603919	10.3493801
53	91271.54	223378.45	244740.54	9.9603354	10.3490413
52	91259.65	223204.33	244581.63	9.9602788	10.3487026
51	91247.75	223030.43	244422.94	9.9602222	10.3483641
50	91235.84	222856.76	244264.48	9.9601655	10.3480258
49	91223.93	222683.31	244106.24	9.9601088	10.3476877
48	91212.01	222510.09	243948.23	9.9600520	10.3473497
47	91200.08	222337.09	243790.45	9.9599952	10.3470119
46	91188.15	222164.32	243632.89	9.9599384	10.3466743
45	91176.20	221991.77	243475.55	9.9598815	10.3463369
44	91164.25	221819.44	243318.44	9.9598246	10.3459996
43	91152.29	221647.33	243161.55	9.9597676	10.3456625
42	91140.33	221475.45	243004.89	9.9597106	10.3453256
41	91128.35	221303.79	242848.44	9.9596535	10.3449888
40	91116.37	221132.34	242692.22	9.9595964	10.3446523
39	91104.38	220961.12	242536.22	9.9595393	10.3443159
38	91092.38	220790.12	242380.44	9.9594821	10.3439796
37	91080.38	220619.34	242224.88	9.9594248	10.3436436
36	91068.37	220448.78	242069.54	9.9593675	10.3433077
35	91056.35	220278.43	241914.42	9.9593102	10.3429720
34	91044.32	220108.31	241759.52	9.9592528	10.3426364
33	91032.28	219938.40	241604.84	9.9591954	10.3423011
32	91020.24	219768.71	241450.38	9.9591380	10.3419659
31	91008.19	219599.23	241296.13	9.9590805	10.3416308
30	90996.13	219429.97	241142.10	9.9590229	10.3412959

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24 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	41469.32	45572.63	109894.79	9.6177270	9.6587041
31	41495.79	45607.77	109909.36	9.6180041	9.6590387
32	41522.26	45642.91	109923.95	9.6182809	9.6593733
33	41548.72	45678.06	109938.55	9.6185576	9.6597076
34	41575.17	45713.22	109953.17	9.6188341	9.6600418
35	41601.63	45748.39	109967.79	9.6191103	9.6603758
36	41628.08	45783.57	109982.43	9.6193864	9.6607097
37	41654.53	45818.77	109997.09	9.6196622	9.6610434
38	41680.97	45853.96	110011.75	9.6199378	9.6613769
39	41707.41	45889.17	110026.44	9.6202132	9.6617103
40	41733.85	45924.39	110041.13	9.6204884	9.6620434
41	41760.28	45959.62	110055.84	9.6207634	9.6623765
42	41786.71	45994.86	110070.56	9.6210382	9.6627093
43	41813.13	46030.11	110085.29	9.6213127	9.6630420
44	41839.56	46065.37	110100.04	9.6215871	9.6633745
45	41865.97	46100.63	110114.80	9.6218612	9.6637069
46	41892.39	46135.91	110129.57	9.6221351	9.6640391
47	41918.80	46171.19	110144.36	9.6224088	9.6643711
48	41945.21	46206.48	110159.16	9.6226824	9.6647030
49	41971.61	46241.78	110173.97	9.6229557	9.6650346
50	41998.01	46277.09	110188.79	9.6232287	9.6653662
51	42024.41	46312.42	110203.63	9.6235016	9.6656975
52	42050.80	46347.76	110218.49	9.6237743	9.6660288
53	42077.19	46383.10	110233.35	9.6240468	9.6663598
54	42103.58	46418.45	110248.23	9.6243190	9.6666907
55	42129.96	46453.82	110263.13	9.6245911	9.6670214
56	42156.34	46489.19	110278.03	9.6248629	9.6673519
57	42182.72	46524.57	110292.95	9.6251346	9.6676823
58	42209.09	46559.96	110307.89	9.6254060	9.6680126
59	42235.46	46595.36	110322.83	9.6256772	9.6683426
60	42261.83	46630.77	110337.79	9.6259483	9.6686725

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65 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	90996.13	219429.97	241142.10	9.9590229	10.3412959
29	90984.06	219260.93	240988.29	9.9589653	10.3409613
28	90971.98	219092.10	240834.69	9.9589077	10.3406267
27	90959.90	218923.49	240681.32	9.9588500	10.3402924
26	90947.81	218755.10	240528.15	9.9587923	10.3399582
25	90935.71	218586.91	240375.20	9.9587345	10.3396242
24	90923.61	218418.94	240222.47	9.9586767	10.3392903
23	90911.50	218251.19	240069.95	9.9586188	10.3389566
22	90899.38	218083.64	239917.64	9.9585609	10.3386231
21	90887.25	217916.31	239765.55	9.9585030	10.3382897
20	90875.11	217749.20	239613.67	9.9584450	10.3379566
19	90862.97	217582.29	239462.01	9.9583869	10.3376235
18	90850.82	217415.59	239310.55	9.9583288	10.3372907
17	90838.66	217249.11	239159.31	9.9582707	10.3369580
16	90826.49	217082.83	239008.28	9.9582125	10.3366255
15	90814.32	216916.77	238857.46	9.9581543	10.3362931
14	90802.14	216750.91	238706.85	9.9580961	10.3359609
13	90789.95	216585.27	238556.45	9.9580378	10.3356289
12	90777.75	216419.83	238406.25	9.9579794	10.3352970
11	90765.54	216254.60	238256.27	9.9579210	10.3349654
10	90753.33	216089.58	238106.50	9.9578626	10.3346338
9	90741.11	215924.76	237956.94	9.9578041	10.3343025
8	90728.88	215760.15	237807.58	9.9577456	10.3339712
7	90716.65	215595.75	237658.43	9.9576870	10.3336402
6	90704.40	215431.56	237509.49	9.9576284	10.3333093
5	90692.15	215267.57	237360.75	9.9575697	10.3329786
4	90679.89	215103.78	237212.22	9.9575110	10.3326481
3	90667.62	214940.20	237063.90	9.9574522	10.3323177
2	90655.35	214776.83	236915.78	9.9573934	10.3319874
1	90643.07	214613.66	236767.87	9.9573346	10.3316574
0	90630.78	214450.69	236620.16	9.9572757	10.3313275

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25 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	42261.83	46630.77	110337.79	9.6259483	9.6686725
1	42288.19	46666.19	110352.77	9.6262191	9.6690023
2	42314.55	46701.62	110367.75	9.6264897	9.6693319
3	42340.90	46737.05	110382.75	9.6267601	9.6696613
4	42367.25	46772.51	110397.77	9.6270303	9.6699906
5	42393.60	46807.97	110412.79	9.6273003	9.6703197
6	42419.94	46843.43	110427.83	9.6275701	9.6706486
7	42446.28	46878.90	110442.89	9.6278397	9.6709774
8	42472.62	46914.38	110457.95	9.6281090	9.6713060
9	42498.95	46949.88	110473.03	9.6283782	9.6716345
10	42525.28	46985.39	110488.13	9.6286472	9.6719628
11	42551.61	47020.90	110503.24	9.6289160	9.6722910
12	42577.93	47056.43	110518.36	9.6291845	9.6726190
13	42604.25	47091.96	110533.49	9.6294529	9.6729468
14	42630.56	47127.51	110548.64	9.6297211	9.6732745
15	42656.87	47163.06	110563.80	9.6299890	9.6736020
16	42683.18	47198.63	110578.98	9.6302568	9.6739294
17	42709.49	47234.20	110594.17	9.6305243	9.6742566
18	42735.79	47269.78	110609.37	9.6307917	9.6745836
19	42762.09	47305.38	110624.58	9.6310589	9.6749105
20	42788.38	47340.98	110639.81	9.6313258	9.6752372
21	42814.67	47376.59	110655.06	9.6315926	9.6755638
22	42840.95	47412.22	110670.31	9.6318591	9.6758903
23	42867.23	47447.85	110685.58	9.6321255	9.6762165
24	42893.51	47483.49	110700.87	9.6323916	9.6765426
25	42919.79	47519.14	110716.16	9.6326576	9.6768686
26	42946.06	47554.81	110731.47	9.6329233	9.6771944
27	42972.33	47590.48	110746.80	9.6331889	9.6775201
28	42998.59	47626.16	110762.14	9.6334542	9.6778456
29	43024.85	47661.85	110777.49	9.6337194	9.6781709
30	43051.11	47697.55	110792.85	9.6339844	9.6784961

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64 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	90630.78	214450.69	236620.16	9.9572757	10.3313275
59	90618.48	214287.93	236472.65	9.9572168	10.3309977
58	90606.17	214125.37	236325.35	9.9571578	10.3306681
57	90593.86	213963.01	236178.26	9.9570988	10.3303387
56	90581.54	213800.85	236031.36	9.9570397	10.3300094
55	90569.21	213638.89	235884.67	9.9569806	10.3296803
54	90556.88	213477.14	235738.18	9.9569215	10.3293514
53	90544.54	213315.59	235591.89	9.9568623	10.3290226
52	90532.19	213154.23	235445.81	9.9568030	10.3286940
51	90519.83	212993.08	235299.92	9.9567437	10.3283655
50	90507.46	212832.13	235154.24	9.9566844	10.3280372
49	90495.09	212671.37	235008.75	9.9566250	10.3277090
48	90482.71	212510.82	234863.47	9.9565656	10.3273810
47	90470.32	212350.46	234718.38	9.9565061	10.3270532
46	90457.92	212190.30	234573.49	9.9564466	10.3267255
45	90445.51	212030.34	234428.80	9.9563870	10.3263980
44	90433.10	211870.57	234284.32	9.9563274	10.3260706
43	90420.68	211711.01	234140.02	9.9562678	10.3257434
42	90408.25	211551.64	233995.93	9.9562081	10.3254164
41	90395.82	211392.46	233852.03	9.9561483	10.3250895
40	90383.38	211233.48	233708.33	9.9560886	10.3247628
39	90370.93	211074.70	233564.82	9.9560287	10.3244362
38	90358.47	210916.11	233421.52	9.9559689	10.3241097
37	90346.00	210757.71	233278.40	9.9559089	10.3237835
36	90333.53	210599.51	233135.48	9.9558490	10.3234574
35	90321.05	210441.50	232992.76	9.9557890	10.3231314
34	90308.56	210283.69	232850.23	9.9557289	10.3228056
33	90296.06	210126.07	232707.90	9.9556688	10.3224799
32	90283.56	209968.64	232565.75	9.9556087	10.3221544
31	90271.05	209811.40	232423.81	9.9555485	10.3218291
30	90258.53	209654.36	232282.05	9.9554882	10.3215039

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25 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	43051.11	47697.55	110792.85	9.6339844	9.6784961
31	43077.36	47733.26	110808.23	9.6342491	9.6788211
32	43103.61	47768.99	110823.63	9.6345137	9.6791460
33	43129.86	47804.72	110839.03	9.6347780	9.6794708
34	43156.10	47840.46	110854.45	9.6350422	9.6797953
35	43182.34	47876.21	110869.89	9.6353062	9.6801198
36	43208.57	47911.97	110885.33	9.6355699	9.6804440
37	43234.80	47947.74	110900.79	9.6358335	9.6807682
38	43261.03	47983.52	110916.27	9.6360969	9.6810921
39	43287.26	48019.32	110931.76	9.6363601	9.6814160
40	43313.48	48055.12	110947.26	9.6366231	9.6817396
41	43339.70	48090.93	110962.77	9.6368859	9.6820632
42	43365.91	48126.75	110978.30	9.6371484	9.6823865
43	43392.12	48162.58	110993.85	9.6374108	9.6827098
44	43418.32	48198.42	111009.40	9.6376731	9.6830328
45	43444.53	48234.27	111024.98	9.6379351	9.6833557
46	43470.72	48270.14	111040.56	9.6381969	9.6836785
47	43496.92	48306.01	111056.16	9.6384585	9.6840011
48	43523.11	48341.89	111071.77	9.6387199	9.6843236
49	43549.30	48377.78	111087.40	9.6389812	9.6846459
50	43575.48	48413.68	111103.04	9.6392422	9.6849681
51	43601.66	48449.59	111118.69	9.6395030	9.6852901
52	43627.84	48485.52	111134.36	9.6397637	9.6856120
53	43654.01	48521.45	111150.04	9.6400241	9.6859338
54	43680.18	48557.39	111165.73	9.6402844	9.6862553
55	43706.34	48593.34	111181.44	9.6405445	9.6865768
56	43732.50	48629.31	111197.16	9.6408044	9.6868981
57	43758.66	48665.28	111212.90	9.6410640	9.6872192
58	43784.82	48701.26	111228.65	9.6413235	9.6875402
59	43810.97	48737.26	111244.42	9.6415828	9.6878611
60	43837.11	48773.26	111260.19	9.6418420	9.6881818

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64 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	90258.53	209654.36	232282.05	9.9554882	10.3215039
29	90246.00	209497.51	232140.49	9.9554280	10.3211789
28	90233.47	209340.84	231999.11	9.9553676	10.3208540
27	90220.92	209184.37	231857.94	9.9553073	10.3205292
26	90208.38	209028.09	231716.95	9.9552469	10.3202047
25	90195.82	208872.00	231576.15	9.9551864	10.3198802
24	90183.25	208716.10	231435.54	9.9551259	10.3195560
23	90170.68	208560.39	231295.13	9.9550653	10.3192318
22	90158.10	208404.86	231154.90	9.9550047	10.3189079
21	90145.51	208249.53	231014.86	9.9549441	10.3185840
20	90132.91	208094.38	230875.01	9.9548834	10.3182604
19	90120.31	207939.42	230735.35	9.9548227	10.3179368
18	90107.70	207784.65	230595.88	9.9547619	10.3176135
17	90095.08	207630.07	230456.60	9.9547011	10.3172902
16	90082.45	207475.67	230317.51	9.9546402	10.3169672
15	90069.82	207321.46	230178.60	9.9545793	10.3166443
14	90057.18	207167.43	230039.88	9.9545184	10.3163215
13	90044.53	207013.59	229901.34	9.9544574	10.3159989
12	90031.87	206859.93	229762.99	9.9543963	10.3156764
11	90019.21	206706.46	229624.83	9.9543352	10.3153541
10	90006.54	206553.18	229486.85	9.9542741	10.3150319
9	89993.86	206400.08	229349.06	9.9542129	10.3147099
8	89981.17	206247.16	229211.45	9.9541517	10.3143880
7	89968.48	206094.42	229074.03	9.9540904	10.3140662
6	89955.78	205941.87	228936.79	9.9540291	10.3137447
5	89943.07	205789.50	228799.74	9.9539677	10.3134232
4	89930.35	205637.32	228662.86	9.9539063	10.3131019
3	89917.63	205485.31	228526.18	9.9538448	10.3127808
2	89904.89	205333.49	228389.67	9.9537833	10.3124598
1	89892.15	205181.85	228253.35	9.9537218	10.3121389
0	89879.40	205030.38	228117.20	9.9536602	10.3118182

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26 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	43837.12	48773.26	111260.19	9.6418420	9.6881818
1	43863.26	48809.27	111275.98	9.6421009	9.6885023
2	43889.40	48845.30	111291.79	9.6423596	9.6888227
3	43915.53	48881.33	111307.61	9.6426182	9.6891430
4	43941.66	48917.37	111323.45	9.6428765	9.6894631
5	43967.79	48953.43	111339.30	9.6431347	9.6897831
6	43993.92	48989.49	111355.16	9.6433926	9.6901030
7	44020.04	49025.57	111371.03	9.6436504	9.6904226
8	44046.15	49061.66	111386.92	9.6439080	9.6907422
9	44072.27	49097.75	111402.82	9.6441654	9.6910616
10	44098.38	49133.86	111418.74	9.6444226	9.6913809
11	44124.48	49169.97	111434.67	9.6446796	9.6917000
12	44150.59	49206.10	111450.62	9.6449365	9.6920189
13	44176.68	49242.24	111466.58	9.6451931	9.6923378
14	44202.78	49278.38	111482.55	9.6454496	9.6926565
15	44228.87	49314.54	111498.54	9.6457058	9.6929750
16	44254.96	49350.71	111514.54	9.6459619	9.6932934
17	44281.04	49386.89	111530.56	9.6462178	9.6936117
18	44307.12	49423.08	111546.59	9.6464735	9.6939298
19	44333.19	49459.28	111562.63	9.6467290	9.6942478
20	44359.27	49495.49	111578.69	9.6469844	9.6945656
21	44385.34	49531.71	111594.76	9.6472395	9.6948833
22	44411.40	49567.94	111610.84	9.6474945	9.6952009
23	44437.46	49604.18	111626.94	9.6477492	9.6955183
24	44463.52	49640.43	111643.06	9.6480038	9.6958355
25	44489.57	49676.69	111659.19	9.6482582	9.6961527
26	44515.62	49712.97	111675.33	9.6485124	9.6964697
27	44541.67	49749.25	111691.49	9.6487665	9.6967865
28	44567.71	49785.54	111707.66	9.6490203	9.6971032
29	44593.75	49821.85	111723.84	9.6492740	9.6974198
30	44619.78	49858.16	111740.04	9.6495274	9.6977363

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63 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	89879.40	205030.38	228117.20	9.9536602	10.3118182
59	89866.65	204879.10	227981.24	9.9535985	10.3114977
58	89853.89	204728.00	227845.46	9.9535369	10.3111773
57	89841.12	204577.08	227709.86	9.9534751	10.3108570
56	89828.34	204426.34	227574.45	9.9534134	10.3105369
55	89815.55	204275.78	227439.21	9.9533515	10.3102169
54	89802.76	204125.40	227304.15	9.9532897	10.3098970
53	89789.96	203975.19	227169.27	9.9532278	10.3095774
52	89777.15	203825.17	227034.57	9.9531658	10.3092578
51	89764.33	203675.32	226900.05	9.9531038	10.3089384
50	89751.51	203525.65	226765.71	9.9530418	10.3086191
49	89738.68	203376.15	226631.55	9.9529797	10.3083000
48	89725.84	203226.83	226497.56	9.9529175	10.3079811
47	89712.99	203077.69	226363.75	9.9528553	10.3076622
46	89700.14	202928.73	226230.12	9.9527931	10.3073435
45	89687.27	202779.94	226096.67	9.9527308	10.3070250
44	89674.40	202631.33	225963.39	9.9526685	10.3067066
43	89661.53	202482.89	225830.29	9.9526061	10.3063883
42	89648.64	202334.62	225697.36	9.9525437	10.3060702
41	89635.75	202186.53	225564.61	9.9524813	10.3057522
40	89622.85	202038.62	225432.04	9.9524188	10.3054344
39	89609.94	201890.88	225299.64	9.9523562	10.3051167
38	89597.03	201743.31	225167.41	9.9522936	10.3047991
37	89584.11	201595.92	225035.36	9.9522310	10.3044817
36	89571.18	201448.69	224903.48	9.9521683	10.3041645
35	89558.24	201301.64	224771.78	9.9521055	10.3038473
34	89545.29	201154.77	224640.24	9.9520428	10.3035303
33	89532.34	201008.06	224508.89	9.9519799	10.3032135
32	89519.38	200861.53	224377.70	9.9519171	10.3028968
31	89506.41	200715.16	224246.69	9.9518541	10.3025802
30	89493.43	200568.97	224115.84	9.9517912	10.3022637

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26 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	44619.78	49858.16	111740.04	9.6495274	9.6977363
31	44645.81	49894.49	111756.25	9.6497807	9.6980526
32	44671.84	49930.82	111772.48	9.6500338	9.6983687
33	44697.86	49967.17	111788.72	9.6502868	9.6986847
34	44723.88	50003.52	111804.98	9.6505395	9.6990006
35	44749.90	50039.89	111821.25	9.6507920	9.6993164
36	44775.91	50076.27	111837.53	9.6510444	9.6996320
37	44801.92	50112.66	111853.83	9.6512966	9.6999474
38	44827.92	50149.06	111870.14	9.6515486	9.7002628
39	44853.92	50185.47	111886.47	9.6518004	9.7005780
40	44879.92	50221.89	111902.81	9.6520521	9.7008930
41	44905.91	50258.32	111919.16	9.6523035	9.7012080
42	44931.90	50294.76	111935.53	9.6525548	9.7015227
43	44957.89	50331.21	111951.91	9.6528059	9.7018374
44	44983.87	50367.67	111968.31	9.6530568	9.7021519
45	45009.85	50404.15	111984.72	9.6533075	9.7024663
46	45035.82	50440.63	112001.15	9.6535581	9.7027805
47	45061.79	50477.13	112017.59	9.6538084	9.7030946
48	45087.75	50513.63	112034.05	9.6540586	9.7034086
49	45113.72	50550.15	112050.51	9.6543086	9.7037225
50	45139.67	50586.68	112067.00	9.6545584	9.7040362
51	45165.63	50623.22	112083.50	9.6548081	9.7043497
52	45191.58	50659.77	112100.01	9.6550575	9.7046632
53	45217.53	50696.33	112116.53	9.6553068	9.7049765
54	45243.47	50732.90	112133.07	9.6555559	9.7052897
55	45269.41	50769.48	112149.63	9.6558048	9.7056027
56	45295.35	50806.07	112166.20	9.6560536	9.7059156
57	45321.28	50842.67	112182.78	9.6563021	9.7062284
58	45347.21	50879.28	112199.38	9.6565505	9.7065410
59	45373.13	50915.91	112216.00	9.6567987	9.7068535
60	45399.05	50952.54	112232.62	9.6570468	9.7071659

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63 Grad.

Minut.	Sinus.	Tang.	Secant.		Log. Sin.	Log. Tang.
30	89493.44	200568.97	224115.85		9.9517912	10.3022637
29	89480.45	200422.95	223985.17		9.9517282	10.3019474
28	89467.46	200277.10	223854.68		9.9516651	10.3016313
27	89454.46	200131.42	223724.35		9.9516020	10.3013153
26	89441.46	199985.90	223594.19		9.9515389	10.3009994
25	89428.44	199840.56	223464.20		9.9514757	10.3006836
24	89415.42	199695.39	223334.38		9.9514124	10.3003680
23	89402.39	199550.38	223204.74		9.9513492	10.3000526
22	89389.36	199405.54	223075.26		9.9512858	10.2997372
21	89376.32	199260.87	222945.95		9.9512224	10.2994220
20	89363.27	199116.37	222816.81		9.9511590	10.2991070
19	89350.21	198972.04	222687.83		9.9510956	10.2987920
18	89337.14	198827.87	222559.03		9.9510320	10.2984773
17	89324.06	198683.87	222430.39		9.9509685	10.2981626
16	89310.98	198540.03	222301.92		9.9509049	10.2978481
15	89297.89	198396.36	222173.62		9.9508412	10.2975337
14	89284.79	198252.86	222045.48		9.9507775	10.2972195
13	89271.69	198109.52	221917.52		9.9507138	10.2969054
12	89258.58	197966.35	221789.71		9.9506500	10.2965914
11	89245.46	197823.34	221662.07		9.9505861	10.2962775
10	89232.33	197680.50	221534.60		9.9505223	10.2959638
9	89219.20	197537.82	221407.30		9.9504583	10.2956503
8	89206.06	197395.31	221280.16		9.9503944	10.2953368
7	89192.91	197252.96	221153.18		9.9503303	10.2950235
6	89179.75	197110.77	221026.37		9.9502663	10.2947103
5	89166.59	196968.74	220899.72		9.9502022	10.2943973
4	89153.42	196826.88	220773.23		9.9501380	10.2940844
3	89140.24	196685.18	220646.91		9.9500738	10.2937716
2	89127.05	196543.64	220520.75		9.9500095	10.2934590
1	89113.85	196402.27	220394.76		9.9499452	10.2931465
0	89100.65	196261.05	220268.93		9.9498809	10.2928341

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27 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	45399.05	50952.54	112232.62	9.6570468	9.7071659
1	45424.97	50989.19	112249.27	9.6572946	9.7074781
2	45450.88	51025.85	112265.92	9.6575423	9.7077902
3	45476.79	51062.52	112282.59	9.6577898	9.7081022
4	45502.69	51099.19	112299.28	9.6580371	9.7084141
5	45528.59	51135.88	112315.98	9.6582842	9.7087258
6	45554.49	51172.59	112332.69	9.6585312	9.7090374
7	45580.38	51209.30	112349.42	9.6587780	9.7093488
8	45606.27	51246.02	112366.16	9.6590246	9.7096601
9	45632.16	51282.75	112382.92	9.6592710	9.7099713
10	45658.04	51319.50	112399.69	9.6595173	9.7102824
11	45683.92	51356.25	112416.48	9.6597633	9.7105933
12	45709.79	51393.02	112433.28	9.6600093	9.7109041
13	45735.66	51429.80	112450.10	9.6602550	9.7112148
14	45761.53	51466.58	112466.93	9.6605005	9.7115254
15	45787.39	51503.38	112483.77	9.6607459	9.7118358
16	45813.25	51540.19	112500.63	9.6609911	9.7121461
17	45839.10	51577.02	112517.50	9.6612361	9.7124562
18	45864.96	51613.85	112534.39	9.6614810	9.7127662
19	45890.80	51650.69	112551.30	9.6617257	9.7130761
20	45916.64	51687.55	112568.21	9.6619702	9.7133859
21	45942.48	51724.41	112585.14	9.6622145	9.7136956
22	45968.32	51761.29	112602.09	9.6624586	9.7140051
23	45994.15	51798.18	112619.05	9.6627026	9.7143145
24	46019.98	51835.08	112636.03	9.6629464	9.7146237
25	46045.80	51871.99	112653.02	9.6631900	9.7149329
26	46071.62	51908.91	112670.03	9.6634335	9.7152419
27	46097.44	51945.84	112687.05	9.6636768	9.7155508
28	46123.25	51982.78	112704.08	9.6639199	9.7158595
29	46149.06	52019.74	112721.13	9.6641628	9.7161682
30	46174.86	52056.70	112738.19	9.6644056	9.7164767

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62 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	89100.65	196261.05	220268.93	9.9498809	10.2928341
59	89087.44	196120.00	220143.26	9.9498165	10.2925219
58	89074.23	195979.10	220017.75	9.9497521	10.2922098
57	89061.00	195838.37	219892.40	9.9496876	10.2918978
56	89047.77	195697.80	219767.21	9.9496230	10.2915859
55	89034.53	195557.39	219642.19	9.9495585	10.2912742
54	89021.28	195417.13	219517.33	9.9494938	10.2909626
53	89008.03	195277.04	219392.62	9.9494292	10.2906512
52	88994.76	195137.11	219268.08	9.9493645	10.2903399
51	88981.49	194997.33	219143.70	9.9492997	10.2900287
50	88968.21	194857.71	219019.47	9.9492349	10.2897176
49	88954.93	194718.26	218895.41	9.9491700	10.2894067
48	88941.64	194578.96	218771.50	9.9491051	10.2890959
47	88928.34	194439.81	218647.75	9.9490402	10.2887852
46	88915.03	194300.83	218524.17	9.9489752	10.2884746
45	88901.71	194162.00	218400.74	9 9489101	10.2881642
44	88888.39	194023.33	218277.46	9.9488450	10.2878539
43	88875.06	193884.81	218154.35	9.9487799	10.2875438
42	88861.72	193746.45	218031.39	9.9487147	10.2872338
41	88848.37	193608.25	217908.59	9.9486495	10.2869239
40	88835.02	193470.20	217785.95	9.9485842	10 2866141
39	88821.66	193332.31	217663.46	9.9485189	10.2863044
38	88808.30	193194.57	217541.12	9.9484535	10.2859949
37	88794.92	193056.98	217418.95	9.9483881	10.2856855
36	88781.54	192919.56	217296.93	9.9483227	10.2853763
35	88768.15	192782.28	217175.06	9.9482572	10.2850671
34	88754.75	192645.16	217053.35	9.9481916	10.2847581
33	88741.34	192508.19	216931.80	9.9481260	10.2844492
32	88727.93	192371.38	216810.40	9.9480604	10.2841405
31	88714.51	192234.72	216689.15	9.9479947	10.2838318
30	88701.08	192098.21	216568.06	9.9479289	10.2835233

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27 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	46174.86	52056.70	112738.19	9.6644056	9.7164767
31	46200.66	52093.68	112755.27	9.6646482	9.7167851
32	46226.46	52130.67	112772.37	9.6648906	9.7170933
33	46252.25	52167.67	112789.48	9.6651329	9.7174014
34	46278.04	52204.68	112806.60	9.6653749	9.7177094
35	46303.82	52241.70	112823.74	9.6656168	9.7180173
36	46329.60	52278.74	112840.89	9.6658586	9.7183251
37	46355.38	52315.78	112858.06	9.6661001	9.7186327
38	46381.15	52352.84	112875.24	9.6663415	9.7189402
39	46406.92	52389.90	112892.44	9.6665828	9.7192476
40	46432.69	52426.98	112909.65	9.6668238	9.7195549
41	46458.45	52464.07	112926.87	9.6670647	9.7198620
42	46484.20	52501.17	112944.12	9.6673054	9.7201690
43	46509.96	52538.29	112961.37	9.6675459	9.7204759
44	46535.71	52575.41	112978.64	9.6677863	9.7207827
45	46561.45	52612.54	112995.93	9.6680265	9.7210893
46	46587.19	52649.69	113013.23	9.6682665	9.7213958
47	46612.93	52686.85	113030.55	9.6685064	9.7217022
48	46638.66	52724.02	113047.88	9.6687461	9.7220085
49	46664.39	52761.20	113065.22	9.6689856	9.7223147
50	46690.12	52798.39	113082.58	9.6692250	9.7226207
51	46715.84	52835.59	113099.96	9.6694642	9.7229266
52	46741.56	52872.81	113117.35	9.6697032	9.7232324
53	46767.27	52910.04	113134.75	9.6699420	9.7235381
54	46792.98	52947.27	113152.17	9.6701807	9.7238436
55	46818.69	52984.52	113169.61	9.6704192	9.7241490
56	46844.39	53021.78	113187.06	9.6706576	9.7244543
57	46870.09	53059.06	113204.52	9.6708958	9.7247595
58	46895.78	53096.34	113222.00	9.6711338	9.7250646
59	46921.47	53133.64	113239.50	9.6713716	9.7253695
60	46947.16	53170.94	113257.01	9.6716093	9.7256744

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62 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	88701.08	192098.21	216568.06	9.9479289	10.2835233
29	88687.64	191961.86	216447.12	9.9478631	10.2832149
28	88674.20	191825.65	216326.33	9.9477973	10.2829067
27	88660.75	191689.60	216205.70	9.9477314	10.2825986
26	88647.30	191553.70	216085.22	9.9476655	10.2822906
25	88633.83	191417.95	215964.89	9.9475995	10.2819827
24	88620.36	191282.36	215844.71	9.9475335	10.2816749
23	88606.88	191146.91	215724.69	9.9474674	10.2813673
22	88593.39	191011.62	215604.82	9.9474013	10.2810598
21	88579.89	190876.47	215485.10	9.9473352	10.2807524
20	88566.39	190741.47	215365.53	9.9472689	10.2804451
19	88552.88	190606.63	215246.11	9.9472027	10.2801380
18	88539.36	190471.93	215126.84	9.9471364	10.2798310
17	88525.84	190337.38	215007.72	9.9470700	10.2795241
16	88512.30	190202.99	214888.75	9.9470036	10.2792173
15	88498.76	190068.74	214769.93	9.9469372	10.2789107
14	88485.22	189934.64	214651.27	9.9468707	10.2786042
13	88471.66	189800.68	214532.75	9.9468042	10.2782978
12	88458.10	189666.88	214414.38	9.9467376	10.2779915
11	88444.53	189533.22	214296.15	9.9466710	10.2776853
10	88430.95	189399.71	214178.08	9.9466043	10.2773793
9	88417.36	189266.35	214060.15	9.9465376	10.2770734
8	88403.77	189133.13	213942.38	9.9464708	10.2767676
7	88390.17	189000.06	213824.75	9.9464040	10.2764619
6	88376.56	188867.13	213707.26	9.9463371	10.2761564
5	88362.94	188734.36	213589.93	9.9462702	10.2758510
4	88349.32	188601.72	213472.74	9.9462032	10.2755457
3	88335.69	188469.24	213355.70	9.9461362	10.2752405
2	88322.06	188336.90	213238.80	9.9460692	10.2749354
1	88308.41	188204.70	213122.05	9.9460021	10.2746305
0	88294.76	188072.65	213005.45	9.9459349	10.2743256

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28 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	46947.16	53170.94	113257.01	9.6716093	9.7256744
1	46972.84	53208.26	113274.53	9.6718468	9.7259791
2	46998.52	53245.59	113292.07	9.6720841	9.7262837
3	47024.19	53282.93	113309.62	9.6723213	9.7265881
4	47049.86	53320.29	113327.19	9.6725583	9.7268925
5	47075.53	53357.65	113344.78	9.6727952	9.7271967
6	47101.19	53395.03	113362.38	9.6730319	9.7275008
7	47126.85	53432.42	113379.99	9.6732684	9.7278048
8	47152.50	53469.81	113397.62	9.6735047	9.7281087
9	47178.15	53507.23	113415.27	9.6737409	9.7284124
10	47203.80	33544.65	113432.93	9.6739769	9.7287161
11	47229.44	53582.08	113450.60	9.6742128	9.7290196
12	47255.08	53619.53	113468.29	9.6744485	9.7293230
13	47280.71	53656.99	113486.00	9.6746840	9.7296263
14	47306.34	53694.46	113503.72	9.6749194	9.7299295
15	47331.97	53731.94	113521.46	9.6751546	9.7302325
16	47357.59	53769.43	113539.21	9.6753896	9.7305354
17	47383.21	53806.94	113556.97	9.6756245	9.7308383
18	47408.82	53844.45	113574.76	9.6758592	9.7311410
19	47434.43	53881.98	113592.55	9.6760937	9.7314436
20	47460.04	53919.52	113610.36	9.6763281	9.7317460
21	47485.64	53957.07	113628.19	9.6765623	9.7320484
22	47511.24	53994.64	113646.03	9.6767963	9.7323506
23	47536.83	54032.21	113663.89	9.6770302	9.7326527
24	47562.42	54069.80	113681.76	9.6772640	9.7329547
25	47588.01	54107.40	113699.65	9.6774975	9.7332566
26	47613.59	54145.01	113717.55	9.6777309	9.7335584
27	47639.17	54182.63	113735.47	9.6779642	9.7338601
28	47664.74	54220.27	113753.41	9.6781972	9.7341616
29	47690.31	54257.91	113771.35	9.6784301	9.7344631
30	47715.88	54295.57	113789.32	9.6786629	9.7347644

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61 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	88294.76	188072.65	213005.45	9.9459349	10.2743256
59	88281.10	187940.74	212888.99	9.9458677	10.2740209
58	88267.43	187808.98	212772.67	9.9458005	10.2737163
57	88253.75	187677.36	212656.51	9.9457332	10.2734119
56	88240.07	187545.88	212540.48	9.9456659	10.2731075
55	88226.38	187414.55	212424.60	9.9455985	10.2728033
54	88212.69	187283.36	212308.87	9.9455310	10.2724992
53	88198.98	187152.31	212193.28	9.9454636	10.2721952
52	88185.27	187021.41	212077.83	9.9453960	10.2718913
51	88171.55	186890.64	211962.53	9.9453285	10.2715876
50	88157.82	186760.03	211847.37	9.9452609	10.2712839
49	88144.09	186629.55	211732.35	9.9451932	10.2709804
48	88130.35	186499.21	211617.48	9.9451255	10.2706770
47	88116.60	186369.02	211502.74	9.9450577	10.2703737
46	88102.84	186238.96	211388.15	9.9449899	10.2700705
45	88089.07	186109.05	211273.71	9.9449220	10.2697675
44	88075.30	185979.28	211159.40	9.9448541	10.2694646
43	88061.52	185849.65	211045.23	9.9447862	10.2691617
42	88047.74	185720.15	210931.21	9.9447182	10.2688590
41	88033.94	185590.80	210817.33	9.9446501	10.2685564
40	88020.14	185461.59	210703.59	9.9445821	10.2682540
39	88006.33	185332.52	210589.98	9.9445139	10.2679516
38	87992.51	185203.58	210476.52	9.9444457	10.2676494
37	87978.69	185074.79	210363.20	9.9443775	10.2673473
36	87964.86	184946.13	210250.02	9.9443092	10.2670453
35	87951.02	184817.61	210136.98	9.9442409	10.2667434
34	87937.17	184689.23	210024.08	9.9441725	10.2664416
33	87923.32	184560.99	209911.31	9.9441041	10.2661399
32	87909.46	184432.89	209798.69	9.9440356	10.2658384
31	87895.59	184304.92	209686.20	9.9439671	10.2655369
30	87881.71	184177.09	209573.85	9.9438985	10.2652356

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28 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	47715.88	54295.57	113789.32	9.6786629	9.7347644
31	47741.44	54333.24	113807.30	9.6788955	9.7350656
32	47767.00	54370.92	113825.29	9.6791279	9.7353667
33	47792.55	54408.62	113843.30	9.6793602	9.7356677
34	47818.10	54446.32	113861.33	9.6795923	9.7359685
35	47843.64	54484.04	113879.37	9.6798243	9.7362693
36	47869.19	54521.77	113897.42	9.6800560	9.7365699
37	47894.72	54559.51	113915.50	9.6802877	9.7368705
38	47920.26	54597.27	113933.58	9.6805191	9.7371709
39	47945.79	54635.03	113951.69	9.6807504	9.7374712
40	47971.31	54672.81	113969.81	9.6809816	9.7377714
41	47996.83	54710.60	113987.94	9.6812126	9.7380715
42	48022.35	54748.40	114006.09	9.6814434	9.7383714
43	48047.86	54786.21	114024.25	9.6816741	9.7386713
44	48073.37	54824.04	114042.43	9.6819046	9.7389710
45	48098.88	54861.88	114060.62	9.6821349	9.7392707
46	48124.38	54899.73	114078.83	9.6823651	9.7395702
47	48149.87	54937.59	114097.06	9.6825952	9.7398696
48	48175.37	54975.47	114115.30	9.6828250	9.7401689
49	48200.86	55013.35	114133.56	9.6830548	9.7404681
50	48226.34	55051.25	114151.83	9.6832843	9.7407672
51	48251.82	55089.16	114170.12	9.6835137	9.7410662
52	48277.30	55127.08	114188.42	9.6837430	9.7413650
53	48302.77	55165.02	114206.74	9.6839720	9.7416638
54	48328.24	55202.97	114225.07	9.6842010	9.7419624
55	48353.70	55240.93	114243.42	9.6844297	9.7422609
56	48379.16	55278.90	114261.79	9.6846583	9.7425594
57	48404.62	55316.88	114280.17	9.6848868	9.7428577
58	48430.07	55354.88	114298.57	9.6851151	9.7431559
59	48455.52	55392.88	114316.98	9.6853432	9.7434540
60	48480.96	55430.91	114335.41	9.6855712	9.7437520

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61 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	87881.71	184177.09	209573.85	9.9438985	10.2652356
29	87867.83	184049.39	209461.64	9.9438299	10.2649344
28	87853.94	183921.84	209349.57	9.9437612	10.2646333
27	87840.04	183794.42	209237.64	9.9436925	10.2643323
26	87826.13	183667.13	209125.84	9.9436238	10.2640315
25	87812.22	183539.99	209014.18	9.9435549	10.2637307
24	87798.30	183412.97	208902.65	9.9434861	10.2634301
23	87784.37	183286.10	208791.27	9.9434172	10.2631295
22	87770.43	183159.36	208680.02	9.9433482	10.2628291
21	87756.49	183032.75	208568.90	9.9432792	10.2625288
20	87742.54	182906.28	208457.92	9.9432102	10.2622286
19	87728.58	182779.94	208347.08	9.9431411	10.2619285
18	87714.62	182653.74	208236.37	9.9430720	10.2616286
17	87700.64	182527.67	208125.80	9.9430028	10.2613287
16	87686.66	182401.73	208015.36	9.9429335	10.2610290
15	87672.68	182275.93	207905.06	9.9428643	10.2607293
14	87658.68	182150.26	207794.89	9.9427949	10.2604298
13	87644.68	182024.73	207684.86	9.9427255	10.2601304
12	87630.67	181899.32	207574.96	9.9426561	10.2598311
11	87616.65	181774.05	207465.19	9.9425866	10.2595319
10	87602.63	181648.92	207355.56	9.9425171	10.2592328
9	87588.59	181523.91	207246.06	9.9424476	10.2589338
8	87574.55	181399.04	207136.70	9.9423779	10.2586350
7	87560.50	181274.30	207027.46	9.9423083	10.2583362
6	87546.45	181149.69	206918.36	9.9422386	10.2580376
5	87532.39	181025.21	206809.40	9.9421688	10.2577391
4	87518.32	180900.86	206700.56	9.9420990	10.2574406
3	87504.25	180776.64	206591.86	9.9420291	10.2571423
2	87490.16	180652.56	206483.28	9.9419592	10.2568441
1	87476.07	180528.60	206374.84	9.9418893	10.2565460
0	87461.97	180404.78	206266.53	9.9418193	10.2562480

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29 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	48480.96	55430.91	114335.41	9.6855712	9.7437520
1	48506.40	55468.94	114353.85	9.6857991	9.7440499
2	48531.84	55506.98	114372.31	9.6860267	9.7443476
3	48557.27	55545.04	114390.78	9.6862542	9.7446453
4	48582.70	55583.11	114409.27	9.6864816	9.7449428
5	48608.12	55621.19	114427.78	9.6867088	9.7452403
6	48633.54	55659.29	114446.30	9.6869359	9.7455376
7	48658.95	55697.39	114464.84	9.6871628	9.7458349
8	48684.36	55735.51	114483.39	9.6873895	9.7461320
9	48709.77	55773.64	114501.96	9.6876161	9.7464290
10	48735.17	55811.79	114520.55	9.6878425	9.7467259
11	48760.57	55849.94	114539.15	9.6880688	9.7470227
12	48785.97	55888.11	114557.76	9.6882949	9.7473194
13	48811.36	55926.29	114576.39	9.6885209	9.7476160
14	48836.74	55964.49	114595.04	9.6887467	9.7479125
15	48862.12	56002.69	114613.71	9.6889723	9.7482089
16	48887.50	56040.91	114632.38	9.6891978	9.7485052
17	48912.88	56079.14	114651.08	9.6894232	9.7488013
18	48938.25	56117.38	114669.79	9.6896484	9.7490974
19	48963.61	56155.64	114688.52	9.6898734	9.7493934
20	48988.97	56193.91	114707.26	9.6900983	9.7496892
21	49014.33	56232.19	114726.02	9.6903231	9.7499850
22	49039.68	56270.48	114744.79	9.6905476	9.7502806
23	49065.03	56308.79	114763.58	9.6907721	9.7505762
24	49090.38	56347.10	114782.39	9.6909964	9.7508716
25	49115.72	56385.43	114801.21	9.6912205	9.7511669
26	49141.05	56423.78	114820.05	9.6914445	9.7514622
27	49166.37	56462.13	114838.90	9.6916683	9.7517573
28	49191.71	56500.50	114857.77	9.6918919	9.7520523
29	49217.04	56538.88	114876.65	9.6921155	9.7523472
30	49242.36	56577.28	114895.55	9.6923388	9.7526420

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60 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	87461.97	180404.78	206266.53	9.9418193	10.2562480
59	87447.86	180281.08	206158.36	9.9417492	10.2559501
58	87433.75	180157.51	206050.31	9.9416791	10.2556524
57	87419.63	180034.08	205942.39	9.9416090	10.2553547
56	87405.50	179910.77	205834.60	9.9415388	10.2550572
55	87391.37	179787.59	205726.95	9.9414685	10.2547597
54	87377.22	179664.54	205619.42	9.9413982	10.2544624
53	87363.07	179541.62	205512.03	9.9413279	10.2541651
52	87348.91	179418.83	205404.76	9.9412575	10.2538680
51	87334.75	179296.16	205297.62	9.9411871	10.2535710
50	87320.58	179173.62	205190.61	9.9411166	10.2532741
49	87306.40	179051.21	205083.73	9.9410461	10.2529773
48	87292.21	178928.93	204976.98	9.9409755	10.2526806
47	87278.01	178806.78	204870.36	9.9409048	10.2523840
46	87263.81	178684.75	204763.86	9.9408342	10.2520875
45	87249.60	178562.85	204657.50	9.9407634	10.2517911
44	87235.38	178441.07	204551.26	9.9406927	10.2514948
43	87221.16	178319.43	204445.15	9.9406219	10.2511987
42	87206.93	178197.90	204339.16	9.9405510	10.2509026
41	87192.69	178076.51	204233.30	9.9404801	10.2506066
40	87178.44	177955.24	204127.57	9.9404091	10.2503108
39	87164.19	177834.09	204021.97	9.9403381	10.2500150
38	87149.93	177713.07	203916.49	9.9402670	10.2497194
37	87135.66	177592.18	203811.14	9.9401959	10.2494238
36	87121.38	177471.41	203705.92	9.9401248	10.2491284
35	87107.10	177350.76	203600.82	9.9400535	10.2488331
34	87092.81	177230.24	203495.85	9.9399823	10.2485378
33	87078.51	177109.85	203391.00	9.9399110	10.2482427
32	87064.20	176989.58	203286.28	9.9398396	10.2479477
31	87049.89	176869.43	203181.68	9.9397682	10.2476528
30	87035.57	176749.40	203077.20	9.9396968	10.2473580

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29 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	49242.36	56577.28	114895.55	9.6923388	9.7526420
31	49267.67	56615.68	114914.47	9.6925620	9.7529368
32	49292.98	56654.10	114933.40	9.6927851	9.7532314
33	49318.29	56692.54	114952.35	9.6930080	9.7535259
34	49343.59	56730.98	114971.32	9.6932308	9.7538203
35	49368.89	56769.44	114990.30	9.6934534	9.7541146
36	49394.19	56807.91	115009.30	9.6936758	9.7544088
37	49419.48	56846.39	115028.31	9.6938981	9.7547029
38	49444.76	56884.88	115047.34	9.6941203	9.7549969
39	49470.05	56923.39	115066.38	9.6943423	9.7552908
40	49495.32	56961.91	115085.44	9.6945642	9.7555846
41	49520.60	57000.45	115104.52	9.6947859	9.7558783
42	49545.87	57038.99	115123.61	9.6950074	9.7561718
43	49571.13	57077.55	115142.72	9.6952288	9.7564653
44	49596.39	57116.12	115161.85	9.6954501	9.7567587
45	49621.65	57154.71	115180.99	9.6956712	9.7570520
46	49646.90	57193.31	115200.15	9.6958922	9.7573452
47	49672.15	57231.92	115219.32	9.6961130	9.7576383
48	49697.40	57270.54	115238.51	9.6963336	9.7579313
49	49722.64	57309.18	115257.72	9.6965541	9.7582242
50	49747.87	57347.83	115276.94	9.6967745	9.7585170
51	49773.10	57386.49	115296.18	9.6969947	9.7588096
52	49798.33	57425.16	115315.43	9.6972148	9.7591022
53	49823.55	57463.85	115334.70	9.6974347	9.7593947
54	49848.77	57502.55	115353.99	9.6976545	9.7596871
55	49873.99	57541.26	115373.29	9.6978741	9.7599794
56	49899.20	57579.99	115392.61	9.6980936	9.7602716
57	49924.41	57618.73	115411.95	9.6983129	9.7605637
58	49949.61	57657.48	115431.30	9.6985321	9.7608557
59	49974.81	57696.25	115450.67	9.6987511	9.7611476
60	50000.00	57735.03	115470.05	9.6989700	9.7614394

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60 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	87035.57	176749.40	203077.20	9.9396968	10.2473580
29	87021.24	176629.50	202972.86	9.9396253	10.2470632
28	87006.91	176509.72	202868.63	9.9395537	10.2467686
27	86992.56	176390.07	202764.53	9.9394821	10.2464741
26	86978.21	176270.53	202660.56	9.9394105	10.2461797
25	86963.86	176151.12	202556.70	9.9393388	10.2458854
24	86949.49	176031.83	202452.97	9.9392671	10.2455912
23	86935.12	175912.67	202349.37	9.9391953	10.2452971
22	86920.74	175793.62	202245.89	9.9391234	10.2450031
21	86906.36	175674.70	202142.53	9.9390515	10.2447092
20	86891.96	175555.90	202039.29	9.9389796	10.2444154
19	86877.56	175437.22	201936.18	9.9389076	10.2441217
18	86863.15	175318.66	201833.18	9.9388356	10.2438282
17	86848.74	175200.23	201730.31	9.9387635	10.2435347
16	86834.31	175081.91	201627.56	9.9386914	10.2432413
15	86819.88	174963.71	201524.94	9.9386192	10.2429480
14	86805.44	174845.64	201422.43	9.9385470	10.2426548
13	86791.00	174727.68	201320.05	9.9384747	10.2423617
12	86776.55	174609.84	201217.79	9.9384024	10.2420687
11	86762.09	174492.13	201115.64	9.9383300	10.2417758
10	86747.62	174374.53	201013.62	9.9382576	10.2414830
9	86733.14	174257.05	200911.72	9.9381851	10.2411904
8	86718.66	174139.69	200809.94	9.9381126	10.2408978
7	86704.17	174022.45	200708.28	9.9380400	10.2406053
6	86689.67	173905.33	200606.74	9.9379674	10.2403129
5	86675.17	173788.33	200505.32	9.9378947	10.2400206
4	86660.66	173671.44	200404.02	9.9378220	10.2397284
3	86646.14	173554.68	200302.83	9.9377492	10.2394363
2	86631.61	173438.03	200201.77	9.9376764	10.2391443
1	86617.08	173321.49	200100.83	9.9376035	10.2388524
0	86602.54	173205.08	200000.00	9.9375306	10.2385606

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30 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	50000.00	57735.03	115470.05	9.6989700	9.7614394
1	50025.19	57773.82	115489.45	9.6991887	9.7617311
2	50050.38	57812.62	115508.87	9.6994073	9.7620227
3	50075.56	57851.44	115528.30	9.6996258	9.7623142
4	50100.73	57890.27	115547.75	9.6998441	9.7626056
5	50125.91	57929.11	115567.22	9.7000622	9.7628969
6	50151.07	57967.97	115586.70	9.7002802	9.7631881
7	50176.24	58006.84	115606.20	9.7004981	9.7634792
8	50201.40	58045.73	115625.72	9.7007158	9.7637702
9	50226.55	58084.62	115645.25	9.7009334	9.7640612
10	50251.70	58123.53	115664.80	9.7011508	9.7643520
11	50276.85	58162.45	115684.36	9.7013681	9.7646427
12	50301.99	58201.39	115703.94	9.7015852	9.7649334
13	50327.13	58240.34	115723.54	9.7018022	9.7652239
14	50352.27	58279.30	115743.15	9.7020190	9.7655143
15	50377.40	58318.28	115762.78	9.7022357	9.7658047
16	50402.52	58357.27	115782.43	9.7024523	9.7660949
17	50427.65	58396.27	115802.09	9.7026687	9.7663851
18	50452.77	58435.28	115821.77	9.7028849	9.7666751
19	50477.88	58474.31	115841.46	9.7031011	9.7669651
20	50502.99	58513.35	115861.18	9.7033170	9.7672550
21	50528.09	58552.41	115880.91	9.7035329	9.7675448
22	50553.19	58591.48	115900.65	9.7037486	9.7678344
23	50578.28	58630.56	115920.41	9.7039641	9.7681240
24	50603.38	58669.65	115940.19	9.7041795	9.7684135
25	50628.46	58708.76	115959.99	9.7043947	9.7687029
26	50653.55	58747.88	115979.80	9.7046099	9.7689922
27	50678.63	58787.02	115999.63	9.7048248	9.7692814
28	50703.70	58826.16	116019.47	9.7050397	9.7695705
29	50728.77	58865.33	116039.33	9.7052543	9.7698596
30	50753.84	58904.50	116059.21	9.7054689	9.7701485

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59 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	86602.54	173205.08	200000.00	9.9375306	10.2385606
59	86587.99	173088.78	199899.29	9.9374577	10.2382689
58	86573.44	172972.60	199798.70	9.9373847	10.2379773
57	86558.87	172856.54	199698.23	9.9373116	10.2376858
56	86544.30	172740.60	199597.88	9.9372385	10.2373944
55	86529.73	172624.77	199497.64	9.9371653	10.2371031
54	86515.14	172509.05	199397.53	9.9370921	10.2368119
53	86500.55	172393.46	199297.52	9.9370189	10.2365208
52	86485.95	172277.97	199197.64	9.9369456	10.2362298
51	86471.34	172162.61	199097.87	9.9368722	10.2359388
50	86456.73	172047.36	198998.22	9.9367988	10.2356480
49	86442.11	171932.22	198898.69	9.9367254	10.2353573
48	86427.48	171817.20	198799.27	9.9366519	10.2350666
47	86412.84	171702.30	198699.97	9.9365783	10.2347761
46	86398.20	171587.51	198600.80	9.9365047	10.2344857
45	86383.55	171472.83	198501.72	9.9364311	10.2341953
44	86368.89	171358.27	198402.76	9.9363574	10.2339051
43	86354.23	171243.82	198303.93	9.9362836	10.2336149
42	86339.56	171129.49	198205.20	9.9362098	10.2333249
41	86324.88	171015.27	198106.59	9.9361360	10.2330349
40	86310.19	170901.16	198008.10	9.9360621	10.2327450
39	86295.49	170787.17	197909.72	9.9359881	10.2324552
38	86280.79	170673.29	197811.46	9.9359141	10.2321656
37	86266.08	170559.53	197713.31	9.9358401	10.2318760
36	86251.37	170445.87	197615.27	9.9357660	10.2315865
35	86236.64	170332.33	197517.35	9.9356918	10.2312971
34	86221.91	170218.90	197419.54	9.9356177	10.2310078
33	86207.17	170105.59	197321.85	9.9355434	10.2307186
32	86192.43	169992.38	197224.27	9.9354691	10.2304295
31	86177.68	169879.29	197126.80	9.9353948	10.2301404
30	86162.92	169766.31	197029.44	9.9353204	10.2298515

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30 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	50753.84	58904.50	116059.21	9.7054689	9.7701485
31	50778.90	58943.69	116079.11	9.7056833	9.7704373
32	50803.96	58982.89	116099.02	9.7058975	9.7707261
33	50829.01	59022.11	116118.94	9.7061116	9.7710147
34	50854.06	59061.34	116138.89	9.7063256	9.7713033
35	50879.10	59100.58	116158.85	9.7065394	9.7715917
36	50904.14	59139.84	116178.83	9.7067531	9.7718801
37	50929.18	59179.10	116198.82	9.7069667	9.7721684
38	50954.21	59218.39	116218.83	9.7071801	9.7724566
39	50979.24	59257.68	116238.86	9.7073933	9.7727447
40	51004.26	59296.99	116258.91	9.7076064	9.7730327
41	51029.28	59336.32	116278.97	9.7078194	9.7733206
42	51054.29	59375.65	116299.05	9.7080323	9.7736084
43	51079.30	59415.01	116319.14	9.7082450	9.7738961
44	51104.31	59454.37	116339.25	9.7084575	9.7741838
45	51129.31	59493.75	116359.38	9.7086699	9.7744713
46	51154.31	59533.14	116379.53	9.7088822	9.7747588
47	51179.30	59572.54	116399.69	9.7090943	9.7750462
48	51204.29	59611.96	116419.87	9.7093063	9.7753334
49	51229.27	59651.40	116440.07	9.7095182	9.7756206
50	51254.25	59690.84	116460.28	9.7097299	9.7759077
51	51279.23	59730.30	116480.51	9.7099415	9.7761947
52	51304.20	59769.78	116500.76	9.7101529	9.7764816
53	51329.16	59809.27	116521.02	9.7103642	9.7767685
54	51354.13	59848.77	116541.30	9.7105753	9.7770552
55	51379.08	59888.28	116561.60	9.7107863	9.7773418
56	51404.04	59927.81	116581.91	9.7109972	9.7776284
57	51428.99	59967.35	116602.24	9.7112080	9.7779149
58	51453.93	60006.91	116622.59	9.7114186	9.7782012
59	51478.87	60046.48	116642.96	9.7116290	9.7784875
60	51503.81	60086.06	116663.34	9.7118393	9.7787737

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59 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	86162.92	169766.31	197029.44	9.9353204	10.2298515
29	86148.15	169653.44	196932.20	9.9352459	10.2295627
28	86133.37	169540.69	196835.07	9.9351715	10.2292739
27	86118.59	169428.04	196738.05	9.9350969	10.2289853
26	86103.80	169315.50	196641.14	9.9350223	10.2286967
25	86089.01	169203.08	196544.35	9.9349477	10.2284083
24	86074.20	169090.77	196447.67	9.9348730	10.2281199
23	86059.39	168978.56	196351.10	9.9347983	10.2278316
22	86044.57	168866.47	196254.64	9.9347235	10.2275434
21	86029.74	168754.49	196158.29	9.9346486	10.2272553
20	86014.91	168642.61	196062.06	9.9345738	10.2269673
19	86000.07	168530.85	195965.93	9.9344988	10.2266794
18	85985.23	168419.19	195869.92	9.9344238	10.2263916
17	85970.37	168307.65	195774.02	9.9343488	10.2261039
16	85955.51	168196.21	195678.22	9.9342737	10.2258162
15	85940.64	168084.89	195582.54	9.9341986	10.2255287
14	85925.76	167973.67	195486.97	9.9341234	10.2252412
13	85910.88	167862.56	195391.50	9.9340482	10.2249538
12	85895.99	167751.56	195296.15	9.9339729	10.2246666
11	85881.09	167640.67	195200.91	9.9338976	10.2243794
10	85866.19	167529.88	195105.77	9.9338222	10.2240923
9	85851.27	167419.21	195010.75	9.9337467	10.2238053
8	85836.35	167308.64	194915.83	9.9336713	10.2235184
7	85821.43	167198.18	194821.02	9.9335957	10.2232315
6	85806.49	167087.82	194726.32	9.9335201	10.2229448
5	85791.55	166977.58	194631.73	9.9334445	10.2226582
4	85776.60	166867.44	194537.25	9.9333688	10.2223716
3	85761.64	166757.41	194442.88	9.9332931	10.2220851
2	85746.68	166647.48	194348.61	9.9332173	10.2217988
1	85731.71	166537.66	194254.45	9.9331415	10.2215125
0	85716.73	166427.95	194160.40	9.9330656	10.2212263

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31 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	51503.81	60086.06	116663.34	9.7118393	9.7787737
1	51528.74	60125.66	116683.74	9.7120495	9.7790599
2	51553.67	60165.27	116704.16	9.7122596	9.7793459
3	51578.59	60204.90	116724.59	9.7124695	9.7796318
4	51603.51	60244.54	116745.04	9.7126792	9.7799177
5	51628.42	60284.19	116765.51	9.7128889	9.7802034
6	51653.33	60323.86	116785.99	9.7130983	9.7804891
7	51678.24	60363.54	116806.49	9.7133077	9.7807747
8	51703.14	60403.23	116827.01	9.7135169	9.7810602
9	51728.04	60442.94	116847.55	9.7137260	9.7813456
10	51752.93	60482.66	116868.10	9.7139349	9.7816309
11	51777.82	60522.40	116888.67	9.7141437	9.7819162
12	51802.70	60562.15	116909.26	9.7143524	9.7822013
13	51827.58	60601.92	116929.86	9.7145609	9.7824864
14	51852.46	60641.70	116950.48	9.7147693	9.7827713
15	51877.33	60681.49	116971.12	9.7149776	9.7830562
16	51902.19	60721.30	116991.78	9.7151857	9.7833410
17	51927.05	60761.12	117012.45	9.7153937	9.7836258
18	51951.91	60800.95	117033.14	9.7156015	9.7839104
19	51976.76	60840.80	117053.85	9.7158092	9.7841949
20	52001.61	60880.67	117074.57	9.7160168	9.7844794
21	52026.46	60920.54	117095.31	9.7162243	9.7847638
22	52051.30	60960.43	117116.07	9.7164316	9.7850481
23	52076.13	61000.34	117136.85	9.7166387	9.7853323
24	52100.96	61040.26	117157.64	9.7168458	9.7856164
25	52125.79	61080.19	117178.45	9.7170526	9.7859004
26	52150.61	61120.14	117199.28	9.7172594	9.7861844
27	52175.43	61160.11	117220.13	9.7174660	9.7864682
28	52200.24	61200.08	117240.99	9.7176725	9.7867520
29	52225.05	61240.07	117261.87	9.7178789	9.7870357
30	52249.86	61280.08	117282.77	9.7180851	9.7873193

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58 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	85716.73	166427.95	194160.40	9.9330656	10.2212263
59	85701.74	166318.34	194066.46	9.9329897	10.2209401
58	85686.75	166208.84	193972.62	9.9329137	10.2206541
57	85671.75	166099.45	193878.89	9.9328376	10.2203682
56	85656.74	165990.16	193785.27	9.9327616	10.2200823
55	85641.73	165880.97	193691.76	9.9326854	10.2197966
54	85626.71	165771.89	193598.35	9.9326092	10.2195109
53	85611.68	165662.92	193505.05	9.9325330	10.2192253
52	85596.64	165554.05	193411.85	9.9324567	10.2189398
51	85581.60	165445.29	193318.76	9.9323804	10.2186544
50	85566.55	165336.63	193225.78	9.9323040	10.2183691
49	85551.49	165228.08	193132.90	9.9322276	10.2180838
48	85536.43	165119.63	193040.13	9.9321511	10.2177987
47	85521.35	165011.28	192947.46	9.9320746	10.2175136
46	85506.27	164903.04	192854.90	9.9319980	10.2172287
45	85491.19	164794.90	192762.44	9.9319213	10.2169438
44	85476.09	164686.87	192670.09	9.9318447	10.2166590
43	85460.99	164578.93	192577.84	9.9317679	10.2163742
42	85445.88	164471.11	192485.70	9.9316911	10.2160896
41	85430.77	164363.38	192393.66	9.9316143	10.2158051
40	85415.64	164255.76	192301.73	9.9315374	10.2155206
39	85400.51	164148.24	192209.90	9.9314605	10.2152362
38	85385.38	164040.82	192118.17	9.9313835	10.2149519
37	85370.23	163933.51	192026.55	9.9313065	10.2146677
36	85355.08	163826.30	191935.03	9.9312294	10.2143836
35	85339.92	163719.19	191843.62	9.9311522	10.2140996
34	85324.75	163612.18	191752.30	9.9310750	10.2138156
33	85309.58	163505.28	191661.09	9.9309978	10.2135318
32	85294.40	163398.47	191569.99	9.9309205	10.2132480
31	85279.21	163291.77	191478.99	9.9308432	10.2129643
30	85264.02	163185.17	191388.09	9.9307658	10.2126807

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31 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	52249.86	61280.08	117282.77	9.7180851	9.7873193
31	52274.66	61320.10	117303.68	9.7182912	9.7876028
32	52299.45	61360.13	117324.62	9.7184971	9.7878863
33	52324.24	61400.18	117345.57	9.7187030	9.7881696
34	52349.03	61440.24	117366.53	9.7189086	9.7884529
35	52373.81	61480.32	117387.52	9.7191142	9.7887361
36	52398.59	61520.41	117408.52	9.7193196	9.7890192
37	52423.36	61560.52	117429.54	9.7195249	9.7893023
38	52448.13	61600.64	117450.58	9.7197300	9.7895852
39	52472.90	61640.77	117471.63	9.7199350	9.7898681
40	52497.66	61680.92	117492.70	9.7201399	9.7901508
41	52522.41	61721.08	117513.80	9.7203447	9.7904335
42	52547.17	61761.26	117534.91	9.7205493	9.7907161
43	52571.91	61801.45	117556.03	9.7207538	9.7909987
44	52596.65	61841.66	117577.17	9.7209581	9.7912811
45	52621.39	61881.88	117598.33	9.7211623	9.7915635
46	52646.13	61922.11	117619.51	9.7213664	9.7918458
47	52670.85	61962.36	117640.70	9.7215704	9.7921280
48	52695.58	62002.63	117661.91	9.7217742	9.7924101
49	52720.30	62042.91	117683.14	9.7219779	9.7926921
50	52745.02	62083.20	117704.39	9.7221814	9.7929741
51	52769.73	62123.51	117725.66	9.7223848	9.7932560
52	52794.43	62163.83	117746.94	9.7225881	9.7935378
53	52819.14	62204.17	117768.24	9.7227913	9.7938195
54	52843.83	62244.52	117789.56	9.7229943	9.7941011
55	52868.53	62284.88	117810.89	9.7231972	9.7943827
56	52893.22	62325.26	117832.25	9.7234000	9.7946641
57	52917.90	62365.66	117853.62	9.7236026	9.7949455
58	52942.58	62406.07	117875.01	9.7238051	9.7952268
59	52967.26	62446.50	117896.42	9.7240075	9.7955081
60	52991.93	62486.94	117917.84	9.7242097	9.7957892

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58 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	85264.02	163185.17	191388.09	9.9307658	10.2126807
29	85248.81	163078.67	191297.29	9.9306883	10.2123972
28	85233.60	162972.27	191206.59	9.9306109	10.2121137
27	85218.39	162865.97	191116.00	9.9305333	10.2118304
26	85203.16	162759.77	191025.51	9.9304557	10.2115471
25	85187.93	162653.68	190935.12	9.9303781	10.2112639
24	85172.69	162547.68	190844.83	9.9303004	10.2109808
23	85157.45	162441.78	190754.64	9.9302226	10.2106977
22	85142.19	162335.99	190664.56	9.9301448	10.2104148
21	85126.93	162230.29	190574.57	9.9300670	10.2101319
20	85111.67	162124.69	190484.69	9.9299891	10.2098492
19	85096.39	162019.20	190394.91	9.9299112	10.2095665
18	85081.11	161913.80	190305.22	9.9298332	10.2092839
17	85065.82	161808.50	190215.64	9.9297551	10.2090013
16	85050.53	161703.30	190126.16	9.9296770	10.2087189
15	85035.22	161598.20	190036.78	9.9295989	10.2084365
14	85019.91	161493.20	189947.50	9.9295207	10.2081542
13	85004.59	161388.29	189858.32	9.9294424	10.2078720
12	84989.27	161283.49	189769.24	9.9293641	10.2075899
11	84973.94	161178.78	189680.26	9.9292857	10.2073079
10	84958.60	161074.17	189591.38	9.9292073	10.2070259
9	84943.25	160969.66	189502.59	9.9291289	10.2067440
8	84927.90	160865.25	189413.91	9.9290504	10.2064622
7	84912.54	160760.94	189325.32	9.9289718	10.2061805
6	84897.17	160656.72	189236.84	9.9288932	10.2058989
5	84881.79	160552.60	189148.45	9.9288145	10.2056173
4	84866.41	160448.58	189060.16	9.9287358	10.2053359
3	84851.02	160344.65	188971.97	9.9286571	10.2050545
2	84835.62	160240.82	188883.88	9.9285783	10.2047732
1	84820.22	160137.09	188795.89	9.9284994	10.2044919
0	84804.81	160033.45	188707.99	9.9284205	10.2042108

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32 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	52991.93	62486.94	117917.84	9.7242097	9.7957892
1	53016.59	62527.39	117939.28	9.7244118	9.7960703
2	53041.25	62567.86	117960.74	9.7246138	9.7963513
3	53065.91	62608.34	117982.22	9.7248156	9.7966322
4	53090.57	62648.84	118003.72	9.7250174	9.7969130
5	53115.21	62689.35	118025.23	9.7252189	9.7971938
6	53139.86	62729.88	118046.76	9.7254204	9.7974745
7	53164.50	62770.42	118068.31	9.7256217	9.7977551
8	53189.13	62810.98	118089.88	9.7258229	9.7980356
9	53213.76	62851.55	118111.46	9.7260240	9.7983160
10	53238.39	62892.14	118133.07	9.7262249	9.7985964
11	53263.01	62932.75	118154.69	9.7264257	9.7988767
12	53287.63	62973.36	118176.33	9.7266264	9.7991569
13	53312.24	63013.99	118197.99	9.7268269	9.7994370
14	53336.85	63054.64	118219.66	9.7270273	9.7997170
15	53361.45	63095.30	118241.35	9.7272276	9.7999970
16	53386.05	63135.98	118263.06	9.7274278	9.8002769
17	53410.65	63176.67	118284.79	9.7276278	9.8005567
18	53435.23	63217.38	118306.54	9.7278277	9.8008365
19	53459.82	63258.10	118328.30	9.7280275	9.8011161
20	53484.40	63298.83	118350.08	9.7282271	9.8013957
21	53508.98	63339.59	118371.88	9.7284267	9.8016752
22	53533.55	63380.35	118393.70	9.7286260	9.8019546
23	53558.12	63421.13	118415.54	9.7288253	9.8022340
24	53582.68	63461.93	118437.40	9.7290244	9.8025133
25	53607.24	63502.74	118459.27	9.7292234	9.8027925
26	53631.79	63543.57	118481.16	9.7294223	9.8030716
27	53656.34	63584.41	118503.07	9.7296211	9.8033506
28	53680.89	63625.27	118525.00	9.7298197	9.8036296
29	53705.43	63666.14	118546.94	9.7300182	9.8039085
30	53729.96	63707.03	118568.91	9.7302165	9.8041873

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57 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	84804.81	160033.45	188707.99	9.9284205	10.2042108
59	84789.39	159929.91	188620.19	9.9283415	10.2039297
58	84773.96	159826.47	188532.49	9.9282625	10.2036487
57	84758.53	159723.12	188444.89	9.9281834	10.2033678
56	84743.09	159619.87	188357.38	9.9281043	10.2030870
55	84727.65	159516.72	188269.98	9.9280251	10.2028062
54	84712.19	159413.66	188182.66	9.9279459	10.2025255
53	84696.73	159310.70	188095.45	9.9278666	10.2022449
52	84681.26	159207.83	188008.33	9.9277873	10.2019644
51	84665.78	159105.05	187921.31	9.9277079	10.2016840
50	84650.30	159002.38	187834.38	9.9276285	10.2014036
49	84634.81	158899.79	187747.55	9.9275490	10.2011233
48	84619.32	158797.30	187660.82	9.9274695	10.2008431
47	84603.81	158694.91	187574.18	9.9273899	10.2005630
46	84588.30	158592.61	187487.64	9.9273103	10.2002830
45	84572.78	158490.41	187401.20	9.9272306	10.2000030
44	84557.26	158388.30	187314.85	9.9271509	10.1997231
43	84541.72	158286.28	187228.59	9.9270711	10.1994433
42	84526.18	158184.36	187142.44	9.9269913	10.1991635
41	84510.64	158082.53	187056.37	9.9269114	10.1988839
40	84495.08	157980.79	186970.40	9.9268314	10.1986043
39	84479.52	157879.15	186884.53	9.9267514	10.1983248
38	84463.95	157777.60	186798.75	9.9266714	10.1980454
37	84448.37	157676.15	186713.06	9.9265913	10.1977660
36	84432.79	157574.79	186627.47	9.9265112	10.1974867
35	84417.20	157473.52	186541.97	9.9264310	10.1972075
34	84401.61	157372.34	186456.57	9.9263507	10.1969284
33	84386.00	157271.26	186371.26	9.9262704	10.1966494
32	84370.39	157170.26	186286.05	9.9261901	10.1963704
31	84354.77	157069.36	186200.93	9.9261096	10.1960915
30	84339.14	156968.56	186115.90	9.9260292	10.1958127

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32 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	53729.96	63707.03	118568.91	9.7302165	9.8041873
31	53754.49	63747.93	118590.89	9.7304148	9.8044661
32	53779.02	63788.85	118612.89	9.7306129	9.8047447
33	53803.54	63829.78	118634.90	9.7308109	9.8050233
34	53828.06	63870.73	118656.94	9.7310087	9.8053019
35	53852.57	63911.69	118679.00	9.7312064	9.8055803
36	53877.08	63952.67	118701.07	9.7314040	9.8058587
37	53901.58	63993.66	118723.16	9.7316015	9.8061370
38	53926.08	64034.67	118745.27	9.7317989	9.8064152
39	53950.58	64075.69	118767.40	9.7319961	9.8066933
40	53975.07	64116.73	118789.54	9.7321932	9.8069714
41	53999.55	64157.79	118811.71	9.7323902	9.8072494
42	54024.03	64198.86	118833.89	9.7325870	9.8075273
43	54048.51	64239.94	118856.09	9.7327837	9.8078052
44	54072.98	64281.05	118878.31	9.7329803	9.8080829
45	54097.45	64322.16	118900.55	9.7331768	9.8083606
46	54121.91	64363.29	118922.80	9.7333731	9.8086383
47	54146.37	64404.44	118945.08	9.7335693	9.8089158
48	54170.82	64445.60	118967.37	9.7337654	9.8091933
49	54195.27	64486.78	118989.68	9.7339614	9.8094707
50	54219.71	64527.97	119012.01	9.7341572	9.8097480
51	54244.15	64569.18	119034.36	9.7343529	9.8100253
52	54268.59	64610.41	119056.73	9.7345485	9.8103025
53	54293.02	64651.65	119079.12	9.7347440	9.8105796
54	54317.44	64692.90	119101.52	9.7349393	9.8108566
55	54341.87	64734.17	119123.94	9.7351345	9.8111336
56	54366.28	64775.46	119146.38	9.7353296	9.8114105
57	54390.69	64816.76	119168.84	9.7355246	9.8116873
58	54415.10	64858.08	119191.32	9.7357195	9.8119641
59	54439.51	64899.41	119213.81	9.7359142	9.8122408
60	54463.90	64940.76	119236.33	9.7361088	9.8125174

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57 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	84339.14	156968.56	186115.90	9.9260292	10.1958127
29	84323.51	156867.84	186030.97	9.9259487	10.1955339
28	84307.87	156767.22	185946.12	9.9258681	10.1952553
27	84292.22	156666.69	185861.38	9.9257875	10.1949767
26	84276.57	156566.25	185776.72	9.9257069	10.1946981
25	84260.91	156465.90	185692.16	9.9256261	10.1944197
24	84245.24	156365.64	185607.69	9.9255454	10.1941413
23	84229.56	156265.48	185523.31	9.9254646	10.1938630
22	84213.88	156165.40	185439.03	9.9253837	10.1935848
21	84198.19	156065.42	185354.83	9.9253028	10.1933067
20	84182.49	155965.52	185270.73	9.9252218	10.1930286
19	84166.79	155865.72	185186.72	9.9251408	10.1927506
18	84151.08	155766.01	185102.81	9.9250597	10.1924727
17	84135.36	155666.39	185018.98	9.9249786	10.1921948
16	84119.63	155566.85	184935.25	9.9248974	10.1919171
15	84103.90	155467.41	184851.61	9.9248161	10.1916394
14	84088.16	155368.06	184768.06	9.9247349	10.1913617
13	84072.41	155268.80	184684.59	9.9246535	10.1910842
12	84056.66	155169.63	184601.23	9.9245721	10.1908067
11	84040.90	155070.54	184517.95	9.9244907	10.1905293
10	84025.13	154971.55	184434.76	9.9244092	10.1902520
9	84009.35	154872.64	184351.66	9.9243277	10.1899747
8	83993.57	154773.83	184268.66	9.9242461	10.1896975
7	83977.78	154675.10	184185.74	9.9241644	10.1894204
6	83961.99	154576.47	184102.92	9.9240827	10.1891434
5	83946.18	154477.92	184020.18	9.9240010	10.1888664
4	83930.37	154379.46	183937.53	9.9239191	10.1885895
3	83914.55	154281.08	183854.98	9.9238373	10.1883127
2	83898.73	154182.80	183772.51	9.9237554	10.1880359
1	83882.90	154084.60	183690.13	9.9236734	10.1877592
0	83867.06	153986.50	183607.85	9.9235914	10.1874826

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33 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	54463.90	64940.76	119236.33	9.7361088	9.8125174
1	54488.30	64982.12	119258.86	9.7363032	9.8127939
2	54512.69	65023.50	119281.42	9.7364976	9.8130704
3	54537.07	65064.90	119303.98	9.7366918	9.8133468
4	54561.45	65106.31	119326.58	9.7368859	9.8136231
5	54585.83	65147.74	119349.18	9.7370799	9.8138993
6	54610.20	65189.18	119371.81	9.7372737	9.8141755
7	54634.56	65230.64	119394.46	9.7374675	9.8144516
8	54658.92	65272.11	119417.12	9.7376611	9.8147277
9	54683.28	65313.60	119439.80	9.7378546	9.8150036
10	54707.63	65355.11	119462.50	9.7380479	9.8152795
11	54731.98	65396.63	119485.23	9.7382412	9.8155554
12	54756.32	65438.17	119507.96	9.7384343	9.8158311
13	54780.66	65479.72	119530.72	9.7386273	9.8161068
14	54804.99	65521.29	119553.50	9.7388201	9.8163824
15	54829.32	65562.87	119576.30	9.7390129	9.8166580
16	54853.65	65604.47	119599.11	9.7392055	9.8169335
17	54877.97	65646.09	119621.94	9.7393980	9.8172089
18	54902.28	65687.72	119644.79	9.7395904	9.8174842
19	54926.59	65729.37	119667.67	9.7397827	9.8177595
20	54950.90	65771.03	119690.55	9.7399748	9.8180347
21	54975.20	65812.71	119713.46	9.7401668	9.8183098
22	54999.50	65854.41	119736.39	9.7403587	9.8185849
23	55023.79	65896.12	119759.34	9.7405505	9.8188599
24	55048.07	65937.85	119782.31	9.7407421	9.8191348
25	55072.36	65979.59	119805.29	9.7409337	9.8194096
26	55096.63	66021.35	119828.29	9.7411251	9.8196844
27	55120.91	66063.13	119851.31	9.7413164	9.8199592
28	55145.18	66104.92	119874.35	9.7415075	9.8202338
29	55169.44	66146.73	119897.41	9.7416986	9.8205084
30	55193.70	66188.56	119920.49	9.7418895	9.8207829

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56 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	83867.06	153986.50	183607.85	9.9235914	10.1874826
59	83851.21	153888.48	183525.64	9.9235093	10.1872061
58	83835.36	153790.55	183443.53	9.9234272	10.1869296
57	83819.50	153692.70	183361.51	9.9233450	10.1866532
56	83803.63	153594.94	183279.58	9.9232628	10.1863769
55	83787.75	153497.27	183197.74	9.9231805	10.1861007
54	83771.87	153399.69	183115.99	9.9230982	10.1858245
53	83755.98	153302.20	183034.32	9.9230158	10.1855484
52	83740.09	153204.79	182952.74	9.9229334	10.1852723
51	83724.18	153107.47	182871.25	9.9228509	10.1849964
50	83708.27	153010.23	182789.85	9.9227684	10.1847205
49	83692.35	152913.08	182708.54	9.9226858	10.1844446
48	83676.43	152816.02	182627.31	9.9226032	10.1841689
47	83660.50	152719.04	182546.17	9.9225205	10.1838932
46	83644.56	152622.15	182465.12	9.9224377	10.1836176
45	83628.62	152525.35	182384.16	9.9223549	10.1833420
44	83612.66	152428.63	182303.28	9.9222721	10.1830665
43	83596.70	152332.00	182222.49	9.9221891	10.1827911
42	83580.74	152235.45	182141.79	9.9221062	10.1825158
41	83564.76	152138.99	182061.18	9.9220232	10.1822405
40	83548.78	152042.61	181980.65	9.9219401	10.1819653
39	83532.79	151946.32	181900.21	9.9218570	10.1816902
38	83516.80	151850.12	181819.85	9.9217738	10.1814151
37	83500.80	151754.00	181739.58	9.9216906	10.1811401
36	83484.79	151657.96	181659.40	9.9216073	10.1808652
35	83468.77	151562.01	181579.30	9.9215240	10.1805904
34	83452.75	151466.14	181499.29	9.9214406	10.1803156
33	83436.72	151370.36	181419.37	9.9213572	10.1800408
32	83420.68	151274.66	181339.53	9.9212737	10.1797662
31	83404.63	151179.05	181259.77	9.9211902	10.1794916
30	83388.58	151083.52	181180.10	9.9211066	10.1792171

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33 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	55193.70	66188.56	119920.49	9.7418895	9.8207829
31	55217.95	66230.40	119943.59	9.7420803	9.8210574
32	55242.20	66272.25	119966.71	9.7422710	9.8213317
33	55266.45	66314.13	119989.85	9.7424616	9.8216060
34	55290.69	66356.01	120013.00	9.7426520	9.8218803
35	55314.92	66397.92	120036.18	9.7428423	9.8221545
36	55339.15	66439.84	120059.37	9.7430325	9.8224286
37	55363.38	66481.78	120082.58	9.7432226	9.8227026
38	55387.60	66523.73	120105.82	9.7434126	9.8229766
39	55411.82	66565.70	120129.07	9.7436024	9.8232505
40	55436.03	66607.69	120152.34	9.7437921	9.8235244
41	55460.24	66649.69	120175.63	9.7439817	9.8237981
42	55484.44	66691.71	120198.94	9.7441712	9.8240719
43	55508.64	66733.74	120222.26	9.7443606	9.8243455
44	55532.83	66775.80	120245.62	9.7445498	9.8246191
45	55557.02	66817.86	120268.99	9.7447390	9.8248926
46	55581.21	66859.95	120292.37	9.7449280	9.8251660
47	55605.39	66902.05	120315.77	9.7451169	9.8254394
48	55629.56	66944.17	120339.19	9.7453056	9.8257127
49	55653.73	66986.30	120362.64	9.7454943	9.8259860
50	55677.90	67028.45	120386.10	9.7456828	9.8262592
51	55702.06	67070.61	120409.58	9.7458712	9.8265323
52	55726.21	67112.80	120433.08	9.7460595	9.8268053
53	55750.36	67155.00	120456.60	9.7462477	9.8270783
54	55774.51	67197.21	120480.14	9.7464358	9.8273513
55	55798.65	67239.44	120503.70	9.7466237	9.8276241
56	55822.79	67281.69	120527.28	9.7468115	9.8278969
57	55846.92	67323.96	120550.88	9.7469992	9.8281696
58	55871.05	67366.24	120574.50	9.7471868	9.8284423
59	55895.17	67408.54	120598.14	9.7473743	9.8287149
60	55919.29	67450.85	120621.79	9.7475617	9.8289874

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56 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	83388.58	151083.52	181180.10	9.9211066	10.1792171
29	83372.52	150988.07	181100.52	9.9210229	10.1789426
28	83356.46	150892.71	181021.02	9.9209393	10.1786683
27	83340.38	150797.43	180941.61	9.9208555	10.1783940
26	83324.30	150702.24	180862.28	9.9207717	10.1781197
25	83308.22	150607.13	180783.04	9.9206878	10.1778455
24	83292.12	150512.10	180703.88	9.9206039	10.1775714
23	83276.02	150417.16	180624.81	9.9205200	10.1772974
22	83259.91	150322.30	180545.82	9.9204360	10.1770234
21	83243.80	150227.52	180466.91	9.9203519	10.1767495
20	83227.68	150132.82	180388.09	9.9202678	10.1764756
19	83211.55	150038.20	180309.35	9.9201836	10.1762019
18	83195.41	149943.67	180230.70	9.9200994	10.1759281
17	83179.27	149849.22	180152.13	9.9200151	10.1756545
16	83163.12	149754.86	180073.65	9.9199308	10.1753809
15	83146.96	149660.58	179995.25	9.9198464	10.1751074
14	83130.79	149566.37	179916.93	9.9197619	10.1748340
13	83114.62	149472.26	179838.69	9.9196775	10.1745606
12	83098.44	149378.22	179760.54	9.9195929	10.1742873
11	83082.26	149284.26	179682.47	9.9195083	10.1740140
10	83066.07	149190.39	179604.49	9.9194237	10.1737408
9	83049.87	149096.59	179526.58	9.9193390	10.1734677
8	83033.66	149002.88	179448.76	9.9192542	10.1731947
7	83017.45	148909.25	179371.02	9.9191694	10.1729217
6	83001.23	148815.70	179293.37	9.9190845	10.1726487
5	82985.00	148722.23	179215.80	9.9189996	10.1723759
4	82968.76	148628.84	179138.31	9.9189146	10.1721031
3	82952.52	148535.53	179060.90	9.9188296	10.1718304
2	82936.28	148442.31	178983.57	9.9187445	10.1715577
1	82920.02	148349.16	178906.33	9.9186594	10.1712851
0	82903.76	148256.10	178829.16	9.9185742	10.1710126

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34 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	55919.29	67450.85	120621.79	9.7475617	9.8289874
1	55943.40	67493.18	120645.47	9.7477489	9.8292599
2	55967.51	67535.53	120669.17	9.7479360	9.8295323
3	55991.62	67577.90	120692.89	9.7481230	9.8298047
4	56015.72	67620.28	120716.62	9.7483099	9.8300769
5	56039.81	67662.68	120740.37	9.7484967	9.8303492
6	56063.90	67705.09	120764.14	9.7486833	9.8306213
7	56087.98	67747.52	120787.93	9.7488698	9.8308934
8	56112.06	67789.97	120811.75	9.7490562	9.8311654
9	56136.14	67832.44	120835.59	9.7492425	9.8314374
10	56160.21	67874.92	120859.44	9.7494287	9.8317093
11	56184.28	67917.42	120883.31	9.7496148	9.8319811
12	56208.34	67959.93	120907.20	9.7498007	9.8322529
13	56232.39	68002.46	120931.12	9.7499866	9.8325246
14	56256.45	68045.01	120955.05	9.7501723	9.8327963
15	56280.49	68087.58	120979.00	9.7503579	9.8330679
16	56304.53	68130.16	121002.97	9.7505434	9.8333394
17	56328.57	68172.76	121026.96	9.7507287	9.8336109
18	56352.60	68215.37	121050.97	9.7509140	9.8338823
19	56376.63	68258.01	121075.00	9.7510991	9.8341536
20	56400.65	68300.66	121099.05	9.7512842	9.8344249
21	56424.67	68343.33	121123.12	9.7514691	9.8346961
22	56448.69	68386.01	121147.21	9.7516538	9.8349673
23	56472.70	68428.71	121171.32	9.7518385	9.8352384
24	56496.70	68471.43	121195.45	9.7520231	9.8355094
25	56520.70	68514.16	121219.60	9.7522075	9.8357804
26	56544.69	68556.92	121243.77	9.7523919	9.8360513
27	56568.68	68599.69	121267.95	9.7525761	9.8363221
28	56592.67	68642.47	121292.17	9.7527602	9.8365929
29	56616.65	68685.27	121316.40	9.7529442	9.8368636
30	56640.62	68728.10	121340.64	9.7531280	9.8371343

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55 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	82903.76	148256.10	178829.16	9.9185742	10.1710126
59	82887.49	148163.11	178752.08	9.9184890	10.1707401
58	82871.21	148070.21	178675.08	9.9184037	10.1704677
57	82854.93	147977.38	178598.17	9.9183183	10.1701953
56	82838.64	147884.63	178521.33	9.9182329	10.1699231
55	82822.34	147791.97	178444.57	9.9181475	10.1696508
54	82806.03	147699.38	178367.90	9.9180620	10.1693787
53	82789.72	147606.88	178291.31	9.9179764	10.1691066
52	82773.40	147514.45	178214.79	9.9178908	10.1688346
51	82757.07	147422.10	178138.36	9.9178051	10.1685626
50	82740.74	147329.83	178062.01	9.9177194	10.1682907
49	82724.40	147237.64	177985.74	9.9176336	10.1680189
48	82708.06	147145.53	177909.55	9.9175478	10.1677471
47	82691.70	147053.50	177833.44	9.9174619	10.1674754
46	82675.34	146961.55	177757.40	9.9173760	10.1672037
45	82658.97	146869.67	177681.45	9.9172900	10.1669321
44	82642.60	146777.87	177605.58	9.9172040	10.1666606
43	82626.22	146686.16	177529.79	9.9171179	10.1663891
42	82609.83	146594.52	177454.09	9.9170317	10.1661177
41	82593.43	146502.96	177378.54	9.9169455	10.1658464
40	82577.03	146411.47	177302.90	9.9168593	10.1655751
39	82560.62	146320.07	177227.43	9.9167730	10.1653039
38	82544.20	146228.74	177152.04	9.9166866	10.1650327
37	82527.78	146137.49	177076.72	9.9166002	10.1647616
36	82511.35	146046.32	177001.49	9.9165137	10.1644906
35	82494.91	145955.22	176926.33	9.9164272	10.1642196
34	82478.47	145864.20	176851.25	9.9163406	10.1639487
33	82462.02	145773.26	176776.25	9.9162539	10.1636779
32	82445.56	145682.40	176701.33	9.9161673	10.1634071
31	82429.09	145591.61	176626.49	9.9160805	10.1631364
30	82412.62	145500.90	176551.73	9.9159937	10.1628657

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34 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	56640.62	68728.10	121340.64	9.7531280	9.8371343
31	56664.59	68770.93	121364.91	9.7533118	9.8374049
32	56688.56	68813.79	121389.20	9.7534954	9.8376755
33	56712.52	68856.66	121413.51	9.7536790	9.8379460
34	56736.48	68899.55	121437.84	9.7538624	9.8382164
35	56760.43	68942.46	121462.18	9.7540457	9.8384867
36	56784.37	68985.38	121486.55	9.7542288	9.8387571
37	56808.32	69028.32	121510.94	9.7544119	9.8390273
38	56832.25	69071.28	121535.35	9.7545949	9.8392975
39	56856.19	69114.25	121559.78	9.7547777	9.8395676
40	56880.11	69157.24	121584.23	9.7549604	9.8398377
41	56904.03	69200.25	121608.70	9.7551431	9.8401077
42	56927.95	69243.28	121633.19	9.7553256	9.8403776
43	56951.87	69286.33	121657.70	9.7555080	9.8406475
44	56975.77	69329.39	121682.23	9.7556902	9.8409174
45	56999.68	69372.47	121706.78	9.7558724	9.8411871
46	57023.58	69415.57	121731.35	9.7560544	9.8414569
47	57047.47	69458.68	121755.94	9.7562364	9.8417265
48	57071.36	69501.81	121780.55	9.7564182	9.8419961
49	57095.24	69544.96	121805.18	9.7565999	9.8422657
50	57119.12	69588.13	121829.83	9.7567815	9.8425351
51	57142.99	69631.31	121854.50	9.7569630	9.8428046
52	57166.86	69674.51	121879.19	9.7571444	9.8430739
53	57190.73	69717.73	121903.90	9.7573256	9.8433432
54	57214.59	69760.97	121928.64	9.7575068	9.8436125
55	57238.44	69804.22	121953.39	9.7576878	9.8438817
56	57262.29	69847.49	121978.16	9.7578687	9.8441508
57	57286.14	69890.78	122002.96	9.7580495	9.8444199
58	57309.98	69934.09	122027.77	9.7582302	9.8446889
59	57333.81	69977.41	122052.60	9.7584108	9.8449579
60	57357.64	70020.75	122077.46	9.7585913	9.8452268

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55 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	82412.62	145500.90	176551.73	9.9159937	10.1628657
29	82396.14	145410.27	176477.04	9.9159069	10.1625951
28	82379.65	145319.71	176402.44	9.9158200	10.1623245
27	82363.16	145229.23	176327.91	9.9157330	10.1620540
26	82346.66	145138.83	176253.45	9.9156460	10.1617836
25	82330.15	145048.50	176179.08	9.9155589	10.1615133
24	82313.64	144958.25	176104.78	9.9154718	10.1612429
23	82297.12	144868.08	176030.57	9.9153846	10.1609727
22	82280.59	144777.98	175956.42	9.9152974	10.1607025
21	82264.05	144687.96	175882.36	9.9152101	10.1604324
20	82247.51	144598.01	175808.37	9.9151228	10.1601623
19	82230.96	144508.14	175734.46	9.9150354	10.1598923
18	82214.40	144418.34	175660.63	9.9149479	10.1596224
17	82197.84	144328.62	175586.87	9.9148604	10.1593525
16	82181.27	144238.97	175513.19	9.9147729	10.1590826
15	82164.69	144149.40	175439.59	9.9146852	10.1588129
14	82148.11	144059.91	175366.07	9.9145976	10.1585431
13	82131.52	143970.49	175292.62	9.9145099	10.1582735
12	82114.92	143881.14	175219.24	9.9144221	10.1580039
11	82098.32	143791.87	175145.94	9.9143342	10.1577343
10	82081.70	143702.68	175072.73	9.9142464	10.1574649
9	82065.09	143613.56	174999.58	9.9141584	10.1571954
8	82048.46	143524.51	174926.51	9.9140704	10.1569261
7	82031.83	143435.54	174853.52	9.9139824	10.1566568
6	82015.19	143346.64	174780.60	9.9138943	10.1563875
5	81998.54	143257.81	174707.76	9.9138061	10.1561183
4	81981.89	143169.06	174634.99	9.9137179	10.1558492
3	81965.23	143080.39	174562.30	9.9136296	10.1555801
2	81948.56	142991.78	174489.69	9.9135413	10.1553111
1	81931.89	142903.26	174417.15	9.9134530	10.1550421
0	81915.20	142814.80	174344.68	9.9133645	10.1547732

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35 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	57357.64	70020.75	122077.46	9.7585913	9.8452268
1	57381.47	70064.11	122102.33	9.7587717	9.8454956
2	57405.29	70107.49	122127.23	9.7589519	9.8457644
3	57429.11	70150.89	122152.15	9.7591321	9.8460332
4	57452.92	70194.30	122177.08	9.7593121	9.8463018
5	57476.72	70237.73	122202.04	9.7594920	9.8465705
6	57500.53	70281.18	122227.02	9.7596718	9.8468390
7	57524.32	70324.65	122252.02	9.7598515	9.8471075
8	57548.11	70368.13	122277.03	9.7600311	9.8473760
9	57571.90	70411.63	122302.07	9.7602106	9.8476444
10	57595.68	70455.15	122327.13	9.7603899	9.8479127
11	57619.46	70498.69	122352.22	9.7605692	9.8481810
12	57643.23	70542.24	122377.32	9.7607483	9.8484492
13	57667.00	70585.81	122402.44	9.7609274	9.8487174
14	57690.76	70629.40	122427.58	9.7611063	9.8489855
15	57714.52	70673.01	122452.74	9.7612851	9.8492536
16	57738.27	70716.64	122477.93	9.7614638	9.8495216
17	57762.02	70760.29	122503.13	9.7616424	9.8497896
18	57785.76	70803.95	122528.36	9.7618208	9.8500575
19	57809.50	70847.63	122553.61	9.7619992	9.8503253
20	57833.23	70891.33	122578.87	9.7621775	9.8505931
21	57856.96	70935.04	122604.16	9.7623556	9.8508608
22	57880.69	70978.78	122629.47	9.7625337	9.8511285
23	57904.40	71022.53	122654.80	9.7627116	9.8513961
24	57928.12	71066.30	122680.15	9.7628894	9.8516637
25	57951.83	71110.09	122705.52	9.7630671	9.8519312
26	57975.53	71153.90	122730.91	9.7632447	9.8521987
27	57999.23	71197.73	122756.33	9.7634222	9.8524661
28	58022.92	71241.57	122781.76	9.7635996	9.8527335
29	58046.61	71285.43	122807.22	9.7637769	9.8530008
30	58070.30	71329.31	122832.69	9.7639540	9.8532680

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54 Grad.

Minut.	Sinus.	Tang.	Secant.		*Log. Sin.*	*Log. Tang.*
60	81915.21	142814.80	174344.68		9.9133645	10.1547732
59	81898.52	142726.42	174272.29		9.9132760	10.1545044
58	81881.82	142638.11	174199.97		9.9131875	10.1542356
57	81865.12	142549.87	174127.73		9.9130989	10.1539668
56	81848.41	142461.71	174055.56		9.9130102	10.1536982
55	81831.69	142373.62	173983.47		9.9129215	10.1534295
54	81814.97	142285.61	173911.45		9.9128328	10.1531610
53	81798.24	142197.66	173839.51		9.9127440	10.1528925
52	81781.50	142109.79	173767.64		9.9126551	10.1526240
51	81764.76	142022.00	173695.85		9.9125662	10.1523556
50	81748.01	141934.27	173624.13		9.9124772	10.1520873
49	81731.25	141846.62	173552.48		9.9123882	10.1518190
48	81714.49	141759.04	173480.90		9.9122991	10.1515508
47	81697.72	141671.53	173409.41		9.9122099	10.1512826
46	81680.94	141584.09	173337.98		9.9121207	10.1510145
45	81664.16	141496.73	173266.63		9.9120315	10.1507464
44	81647.36	141409.43	173195.35		9.9119422	10.1504784
43	81630.56	141322.21	173124.14		9.9118528	10.1502104
42	81613.76	141235.06	173053.01		9.9117634	10.1499425
41	81596.95	141147.99	172981.95		9.9116739	10.1496747
40	81580.13	141060.98	172910.96		9.9115844	10.1494069
39	81563.30	140974.05	172840.05		9.9114948	10.1491392
38	81546.47	140887.18	172769.21		9.9114051	10.1488715
37	81529.63	140800.39	172698.44		9.9113155	10.1486039
36	81512.78	140713.67	172627.74		9.9112257	10.1483363
35	81495.93	140627.02	172557.12		9.9111359	10.1480688
34	81479.06	140540.44	172486.57		9.9110460	10.1478013
33	81462.20	140453.93	172416.09		9.9109561	10.1475339
32	81445.32	140367.49	172345.68		9.9108661	10.1472665
31	81428.44	140281.13	172275.34		9.9107761	10.1469992
30	81411.55	140194.83	172205.08		9.9106860	10.1467320

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35 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	58070.30	71329.31	122832.69	9.7639540	9.8532680
31	58093.97	71373.20	122858.19	9.7641311	9.8535352
32	58117.65	71417.12	122883.71	9.7643080	9.8538023
33	58141.32	71461.06	122909.24	9.7644849	9.8540694
34	58164.98	71505.01	122934.80	9.7646616	9.8543365
35	58188.64	71548.98	122960.39	9.7648382	9.8546034
36	58212.30	71592.97	122985.99	9.7650147	9.8548704
37	58235.95	71636.98	123011.61	9.7651911	9.8551372
38	58259.59	71681.00	123037.25	9.7653674	9.8554041
39	58283.23	71725.05	123062.92	9.7655436	9.8556708
40	58306.87	71769.11	123088.61	9.7657197	9.8559376
41	58330.50	71813.19	123114.32	9.7658957	9.8562042
42	58354.12	71857.29	123140.04	9.7660715	9.8564708
43	58377.74	71901.41	123165.80	9.7662473	9.8567374
44	58401.36	71945.54	123191.56	9.7664229	9.8570039
45	58424.97	71989.70	123217.36	9.7665985	9.8572704
46	58448.57	72033.87	123243.17	9.7667739	9.8575368
47	58472.17	72078.06	123269.00	9.7669492	9.8578031
48	58495.77	72122.27	123294.86	9.7671244	9.8580694
49	58519.36	72166.50	123320.74	9.7672996	9.8583357
50	58542.94	72210.75	123346.64	9.7674746	9.8586019
51	58566.52	72255.02	123372.56	9.7676494	9.8588680
52	58590.10	72299.31	123398.50	9.7678242	9.8591341
53	58613.67	72343.61	123424.46	9.7679989	9.8594002
54	58637.24	72387.93	123450.44	9.7681735	9.8596661
55	58660.80	72432.27	123476.45	9.7683480	9.8599321
56	58684.35	72476.63	123502.48	9.7685223	9.8601980
57	58707.90	72521.01	123528.52	9.7686966	9.8604638
58	58731.45	72565.40	123554.59	9.7688707	9.8607296
59	58754.99	72609.82	123580.69	9.7690448	9.8609954
60	58778.53	72654.25	123606.80	9.7692187	9.8612610

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54 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	81411.55	140194.83	172205.08	9.9106860	10.1467320
29	81394.66	140108.60	172134.89	9.9105959	10.1464648
28	81377.75	140022.45	172064.77	9.9105057	10.1461977
27	81360.84	139936.36	171994.72	9.9104155	10.1459306
26	81343.93	139850.34	171924.75	9.9103251	10.1456635
25	81327.01	139764.40	171854.84	9.9102348	10.1453966
24	81310.08	139678.52	171785.01	9.9101444	10.1451296
23	81293.14	139592.72	171715.25	9.9100539	10.1448628
22	81276.20	139506.98	171645.56	9.9099634	10.1445959
21	81259.25	139421.31	171575.94	9.9098728	10.1443292
20	81242.29	139335.71	171506.39	9.9097821	10.1440624
19	81225.32	139250.19	171436.91	9.9096915	10.1437958
18	81208.35	139164.73	171367.50	9.9096007	10.1435292
17	81191.37	139079.34	171298.17	9.9095099	10.1432626
16	81174.39	138994.01	171228.90	9.9094190	10.1429961
15	81157.40	138908.76	171159.70	9.9093281	10.1427296
14	81140.40	138823.58	171090.58	9.9092371	10.1424632
13	81123.39	138738.47	171021.52	9.9091461	10.1421969
12	81106.38	138653.42	170952.54	9.9090550	10.1419306
11	81089.36	138568.44	170883.62	9.9089639	10.1416643
10	81072.34	138483.53	170814.78	9.9088727	10.1413981
9	81055.30	138398.69	170746.01	9.9087814	10.1411320
8	81038.26	138313.92	170677.30	9.9086901	10.1408659
7	81021.22	138229.22	170608.67	9.9085988	10.1405998
6	81004.16	138144.58	170540.10	9.9085073	10.1403339
5	80987.10	138060.01	170471.60	9.9084159	10.1400679
4	80970.04	137975.51	170403.18	9.9083243	10.1398020
3	80952.96	137891.08	170334.82	9.9082327	10.1395362
2	80935.88	137806.72	170266.53	9.9081411	10.1392704
1	80918.79	137722.42	170198.31	9.9080494	10.1390046
0	80901.70	137638.19	170130.16	9.9079576	10.1387390

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36 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log.Sin.*	*Log. Tang.*
0	58778.53	72654.25	123606.80	9.7692187	9.8612610
1	58802.06	72698.71	123632.93	9.7693925	9.8615267
2	58825.58	72743.18	123659.09	9.7695662	9.8617923
3	58849.10	72787.67	123685.26	9.7697398	9.8620578
4	58872.62	72832.18	123711.46	9.7699134	9.8623233
5	58896.13	72876.71	123737.68	9.7700868	9.8625887
6	58919.64	72921.25	123763.93	9.7702601	9.8628541
7	58943.14	72965.82	123790.19	9.7704332	9.8631195
8	58966.63	73010.41	123816.47	9.7706063	9.8633848
9	58990.12	73055.01	123842.78	9.7707793	9.8636500
10	59013.61	73099.63	123869.11	9.7709522	9.8639152
11	59037.09	73144.28	123895.46	9.7711249	9.8641803
12	59060.57	73188.94	123921.83	9.7712976	9.8644454
13	59084.04	73233.62	123948.23	9.7714702	9.8647105
14	59107.50	73278.32	123974.64	9.7716426	9.8649755
15	59130.96	73323.03	124001.08	9.7718150	9.8652404
16	59154.42	73367.77	124027.54	9.7719872	9.8655053
17	59177.87	73412.53	124054.02	9.7721593	9.8657702
18	59201.32	73457.30	124080.52	9.7723314	9.8660350
19	59224.76	73502.10	124107.04	9.7725033	9.8662997
20	59248.19	73546.91	124133.59	9.7726751	9.8665644
21	59271.63	73591.74	124160.16	9.7728468	9.8668291
22	59295.05	73636.60	124186.75	9.7730185	9.8670937
23	59318.47	73681.47	124213.36	9.7731900	9.8673583
24	59341.89	73726.36	124239.99	9.7733614	9.8676228
25	59365.30	73771.27	124266.65	9.7735327	9.8678873
26	59388.71	73816.20	124293.33	9.7737039	9.8681517
27	59412.11	73861.15	124320.03	9.7738749	9.8684160
28	59435.50	73906.11	124346.75	9.7740459	9.8686804
29	59458.89	73951.10	124373.49	9.7742168	9.8689446
30	59482.28	73996.11	124400.26	9.7743876	9.8692089

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53 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	80901.70	137638.19	170130.16	9.9079576	10.1387390
59	80884.60	137554.03	170062.08	9.9078658	10.1384733
58	80867.49	137469.94	169994.07	9.9077740	10.1382077
57	80850.37	137385.91	169926.12	9.9076820	10.1379422
56	80833.25	137301.95	169858.25	9.9075901	10.1376767
55	80816.12	137218.06	169790.44	9.9074980	10.1374113
54	80798.99	137134.23	169722.71	9.9074059	10.1371459
53	80781.85	137050.47	169655.04	9.9073138	10.1368805
52	80764.70	136966.78	169587.44	9.9072216	10.1366152
51	80747.54	136883.15	169519.90	9.9071293	10.1363500
50	80730.38	136799.59	169452.44	9.9070370	10.1360848
49	80713.21	136716.10	169385.04	9.9069446	10.1358197
48	80696.03	136632.67	169317.71	9.9068522	10.1355546
47	80678.85	136549.31	169250.45	9.9067597	10.1352895
46	80661.66	136466.02	169183.26	9.9066671	10.1350245
45	80644.46	136382.79	169116.13	9.9065745	10.1347596
44	80627.26	136299.63	169049.07	9.9064819	10.1344947
43	80610.05	136216.53	168982.08	9.9063892	10.1342298
42	80592.83	136133.50	168915.16	9.9062964	10.1339650
41	80575.60	136050.54	168848.30	9.9062036	10.1337003
40	80558.37	135967.64	168781.51	9.9061107	10.1334356
39	80541.13	135884.81	168714.79	9.9060177	10.1331709
38	80523.89	135802.04	168648.14	9.9059247	10.1329063
37	80506.64	135719.34	168581.55	9.9058317	10.1326417
36	80489.38	135636.70	168515.03	9.9057386	10.1323772
35	80472.11	135554.13	168448.57	9.9056454	10.1321127
34	80454.84	135471.62	168382.19	9.9055522	10.1318483
33	80437.56	135389.18	168315.86	9.9054589	10.1315840
32	80420.28	135306.80	168249.61	9.9053656	10.1313196
31	80402.99	135224.49	168183.42	9.9052722	10.1310554
30	80385.69	135142.24	168117.30	9.9051787	10.1307911

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36 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	59482.28	73996.11	124400.26	9.7743876	9.8692089
31	59505.66	74041.13	124427.05	9.7745583	9.8694731
32	59529.04	74086.18	124453.85	9.7747288	9.8697372
33	59552.41	74131.24	124480.69	9.7748993	9.8700013
34	59575.77	74176.33	124507.54	9.7750697	9.8702653
35	59599.13	74221.43	124534.42	9.7752399	9.8705293
36	59622.49	74266.55	124561.31	9.7754101	9.8707933
37	59645.84	74311.70	124588.23	9.7755801	9.8710572
38	59669.18	74356.86	124615.18	9.7757501	9.8713210
39	59692.52	74402.04	124642.14	9.7759199	9.8715848
40	59715.86	74447.24	124669.13	9.7760897	9.8718486
41	59739.19	74492.46	124696.14	9.7762593	9.8721123
42	59762.51	74537.70	124723.17	9.7764289	9.8723760
43	59785.83	74582.96	124750.22	9.7765983	9.8726396
44	59809.15	74628.24	124777.30	9.7767676	9.8729032
45	59832.46	74673.54	124804.40	9.7769369	9.8731668
46	59855.77	74718.86	124831.52	9.7771060	9.8734302
47	59879.06	74764.20	124858.66	9.7772750	9.8736937
48	59902.36	74809.56	124885.83	9.7774439	9.8739571
49	59925.65	74854.94	124913.02	9.7776128	9.8742204
50	59948.93	74900.33	124940.23	9.7777815	9.8744838
51	59972.21	74945.75	124967.46	9.7779501	9.8747470
52	59995.49	74991.19	124994.71	9.7781186	9.8750102
53	60018.76	75036.65	125021.99	9.7782870	9.8752734
54	60042.02	75082.12	125049.29	9.7784553	9.8755365
55	60065.28	75127.62	125076.61	9.7786235	9.8757996
56	60088.54	75173.14	125103.96	9.7787916	9.8760627
57	60111.79	75218.67	125131.33	9.7789596	9.8763257
58	60135.03	75264.23	125158.72	9.7791275	9.8765886
59	60158.27	75309.81	125186.13	9.7792953	9.8768515
60	60181.50	75355.41	125213.57	9.7794630	9.8771144

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53 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	80385.69	135142.24	168117.30	9.9051787	10.1307911
29	80368.38	135060.06	168051.24	9.9050852	10.1305269
28	80351.07	134977.94	167985.25	9.9049916	10.1302628
27	80333.75	134895.89	167919.33	9.9048980	10.1299987
26	80316.42	134813.90	167853.47	9.9048043	10.1297347
25	80299.09	134731.98	167787.68	9.9047106	10.1294707
24	80281.75	134650.11	167721.95	9.9046168	10.1292067
23	80264.40	134568.32	167656.29	9.9045230	10.1289428
22	80247.05	134486.58	167590.70	9.9044291	10.1286790
21	80229.69	134404.92	167525.17	9.9043351	10.1284152
20	80212.32	134323.31	167459.70	9.9042411	10.1281514
19	80194.95	134241.77	167394.30	9.9041470	10.1278877
18	80177.56	134160.29	167328.97	9.9040529	10.1276240
17	80160.18	134078.88	167263.70	9.9039587	10.1273604
16	80142.78	133997.53	167198.50	9.9038644	10.1270968
15	80125.38	133916.24	167133.36	9.9037701	10.1268332
14	80107.97	133835.02	167068.28	9.9036757	10.1265698
13	80090.56	133753.86	167003.28	9.9035813	10.1263063
12	80073.14	133672.76	166938.33	9.9034868	10.1260429
11	80055.71	133591.72	166873.45	9.9033923	10.1257796
10	80038.27	133510.75	166808.64	9.9032977	10.1255162
9	80020.83	133429.84	166743.89	9.9032031	10.1252530
8	80003.38	133349.00	166679.20	9.9031084	10.1249898
7	79985.93	133268.22	166614.58	9.9030136	10.1247266
6	79968.47	133187.50	166550.02	9.9029188	10.1244635
5	79951.00	133106.84	166485.53	9.9028239	10.1242004
4	79933.52	133026.24	166421.09	9.9027289	10.1239373
3	79916.04	132945.71	166356.73	9.9026339	10.1236743
2	79898.55	132865.24	166292.43	9.9025389	10.1234114
1	79881.05	132784.83	166228.19	9.9024438	10.1231485
0	79863.55	132704.48	166164.01	9.9023486	10.1228856

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37 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang
0	60181.50	75355.41	125213.57	9.7794630	9.8771144
1	60204.73	75401.02	125241.02	9.7796306	9.8773772
2	60227.95	75446.66	125268.50	9.7797981	9.8776400
3	60251.17	75492.32	125296.01	9.7799655	9.8779027
4	60274.39	75537.99	125323.53	9.7801328	9.8781654
5	60297.60	75583.69	125351.08	9.7803000	9.8784281
6	60320.80	75629.41	125378.65	9.7804671	9.8786907
7	60344.00	75675.14	125406.25	9.7806341	9.8789533
8	60367.19	75720.90	125433.87	9.7808010	9.8792158
9	60390.38	75766.68	125461.51	9.7809677	9.8794782
10	60413.56	75812.48	125489.17	9.7811344	9.8797407
11	60436.74	75858.29	125516.85	9.7813010	9.8800031
12	60459.91	75904.13	125544.56	9.7814675	9.8802654
13	60483.08	75949.99	125572.29	9.7816339	9.8805277
14	60506.24	75995.87	125600.05	9.7818002	9.8807900
15	60529.40	76041.77	125627.82	9.7819664	9.8810522
16	60552.55	76087.69	125655.62	9.7821324	9.8813144
17	60575.70	76133.63	125683.45	9.7822984	9.8815765
18	60598.84	76179.59	125711.29	9.7824643	9.8818386
19	60621.98	76225.57	125739.16	9.7826301	9.8821007
20	60645.11	76271.57	125767.05	9.7827958	9.8823627
21	60668.24	76317.59	125794.97	9.7829614	9.8826246
22	60691.36	76363.63	125822.91	9.7831268	9.8828866
23	60714.47	76409.69	125850.87	9.7832922	9.8831484
24	60737.58	76455.77	125878.85	9.7834575	9.8834103
25	60760.69	76501.88	125906.86	9.7836227	9.8836721
26	60783.79	76548.00	125934.89	9.7837878	9.8839338
27	60806.89	76594.14	125962.94	9.7839528	9.8841956
28	60829.98	76640.31	125991.02	9.7841177	9.8844572
29	60853.06	76686.49	126019.12	9.7842824	9.8847189
30	60876.14	76732.70	126047.24	9.7844471	9.8849805

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52 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	79863.55	132704.48	166164.01	9.9023486	10.1228856
59	79846.04	132624.20	166099.90	9.9022534	10.1226228
58	79828.53	132543.97	166035.86	9.9021581	10.1223600
57	79811.00	132463.81	165971.87	9.9020628	10.1220973
56	79793.47	132383.71	165907.95	9.9019674	10.1218346
55	79775.94	132303.68	165844.09	9.9018719	10.1215719
54	79758.39	132223.70	165780.30	9.9017764	10.1213093
53	79740.84	132143.79	165716.57	9.9016808	10.1210467
52	79723.29	132063.93	165652.90	9.9015852	10.1207842
51	79705.72	131984.14	165589.29	9.9014895	10.1205218
50	79688.15	131904.41	165525.75	9.9013938	10.1202593
49	79670.58	131824.74	165462.27	9.9012980	10.1199969
48	79652.99	131745.13	165398.85	9.9012021	10.1197346
47	79635.40	131665.59	165335.50	9.9011062	10.1194723
46	79617.80	131586.10	165272.21	9.9010102	10.1192100
45	79600.20	131506.68	165208.98	9.9009142	10.1189478
44	79582.59	131427.31	165145.81	9.9008181	10.1186856
43	79564.97	131348.01	165082.70	9.9007219	10.1184235
42	79547.35	131268.76	165019.66	9.9006257	10.1181614
41	79529.72	131189.58	164956.68	9.9005294	10.1178993
40	79512.08	131110.46	164893.76	9.9004331	10.1176373
39	79494.44	131031.40	164830.90	9.9003367	10.1173754
38	79476.78	130952.39	164768.11	9.9002403	10.1171134
37	79459.13	130873.45	164705.37	9.9001438	10.1168516
36	79441.46	130794.57	164642.70	9.9000472	10.1165897
35	79423.79	130715.75	164580.09	9.8999506	10.1163279
34	79406.11	130636.99	164517.54	9.8998539	10.1160662
33	79388.43	130558.28	164455.06	9.8997572	10.1158044
32	79370.74	130479.64	164392.63	9.8996604	10.1155428
31	79353.04	130401.06	164330.27	9.8995636	10.1152811
30	79335.33	130322.54	164267.96	9.8994667	10.1150195

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37 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	60876.14	76732.70	126047.24	9.7844471	9.8849805
31	60899.22	76778.93	126075.39	9.7846117	9.8852420
32	60922.29	76825.17	126103.56	9.7847762	9.8855035
33	60945.35	76871.44	126131.75	9.7849406	9.8857650
34	60968.41	76917.73	126159.97	9.7851049	9.8860264
35	60991.47	76964.04	126188.20	9.7852691	9.8862878
36	61014.52	77010.37	126216.47	9.7854332	9.8865492
37	61037.56	77056.72	126244.75	9.7855972	9.8868105
38	61060.60	77103.09	126273.06	9.7857611	9.8870718
39	61083.63	77149.48	126301.40	9.7859249	9.8873330
40	61106.66	77195.89	126329.75	9.7860886	9.8875942
41	61129.69	77242.33	126358.13	9.7862522	9.8878554
42	61152.70	77288.78	126386.53	9.7864157	9.8881165
43	61175.72	77335.26	126414.96	9.7865791	9.8883775
44	61198.73	77381.76	126443.41	9.7867424	9.8886386
45	61221.73	77428.27	126471.88	9.7869056	9.8888996
46	61244.73	77474.81	126500.38	9.7870687	9.8891605
47	61267.72	77521.37	126528.90	9.7872317	9.8894214
48	61290.71	77567.95	126557.45	9.7873946	9.8896823
49	61313.69	77614.55	126586.01	9.7875574	9.8899432
50	61336.66	77661.18	126614.60	9.7877202	9.8902040
51	61359.64	77707.82	126643.22	9.7878828	9.8904647
52	61382.60	77754.48	126671.86	9.7880453	9.8907254
53	61405.56	77801.17	126700.52	9.7882077	9.8909861
54	61428.52	77847.88	126729.21	9.7883701	9.8912468
55	61451.47	77894.60	126757.92	9.7885323	9.8915074
56	61474.42	77941.35	126786.65	9.7886944	9.8917679
57	61497.36	77988.12	126815.41	9.7888565	9.8920285
58	61520.29	78034.92	126844.19	9.7890184	9.8922890
59	61543.22	78081.73	126872.99	9.7891802	9.8925494
60	61566.15	78128.56	126901.82	9.7893420	9.8928098

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52 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	79335.33	130322.54	164267.96	9.8994667	10.1150195
29	79317.62	130244.07	164205.72	9.8993697	10.1147580
28	79299.90	130165.67	164143.54	9.8992727	10.1144965
27	79282.18	130087.33	164081.42	9.8991756	10.1142350
26	79264.45	130009.04	164019.36	9.8990784	10.1139736
25	79246.71	129930.81	163957.36	9.8989812	10.1137122
24	79228.96	129852.65	163895.42	9.8988840	10.1134508
23	79211.21	129774.54	163833.55	9.8987867	10.1131895
22	79193.45	129696.49	163771.73	9.8986893	10.1129282
21	79175.69	129618.50	163709.97	9.8985919	10.1126670
20	79157.92	129540.57	163648.28	9.8984944	10.1124058
19	79140.14	129462.70	163586.64	9.8983968	10.1121446
18	79122.35	129384.88	163525.07	9.8982992	10.1118835
17	79104.56	129307.13	163463.55	9.8982015	10.1116225
16	79086.76	129229.43	163402.10	9.8981038	10.1113614
15	79068.96	129151.79	163340.70	9.8980060	10.1111004
14	79051.15	129074.21	163279.37	9.8979082	10.1108395
13	79033.33	128996.69	163218.09	9.8978103	10.1105786
12	79015.50	128919.22	163156.88	9.8977123	10.1103177
11	78997.67	128841.82	163095.72	9.8976143	10.1100568
10	78979.83	128764.47	163034.62	9.8975162	10.1097960
9	78961.98	128687.18	162973.59	9.8974181	10.1095353
8	78944.13	128609.95	162912.61	9.8973199	10.1092746
7	78926.27	128532.77	162851.69	9.8972216	10.1090139
6	78908.41	128455.66	162790.83	9.8971233	10.1087532
5	78890.54	128378.60	162730.03	9.8970249	10.1084926
4	78872.66	128301.60	162669.29	9.8969265	10.1082321
3	78854.77	128224.65	162608.61	9.8968280	10.1079715
2	78836.88	128147.76	162547.99	9.8967294	10.1077110
1	78818.98	128070.94	162487.43	9.8966308	10.1074506
0	78801.08	127994.16	162426.92	9.8965321	10.1071902

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38 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	61566.15	78128.56	126901.82	9.7893420	9.8928098
1	61589.07	78175.42	126930.67	9.7895036	9.8930702
2	61611.98	78222.29	126959.55	9.7896652	9.8933306
3	61634.89	78269.19	126988.45	9.7898266	9.8935909
4	61657.80	78316.11	127017.37	9.7899880	9.8938511
5	61680.69	78363.05	127046.32	9.7901493	9.8941114
6	61703.59	78410.02	127075.29	9.7903104	9.8943715
7	61726.48	78457.00	127104.29	9.7904715	9.8946317
8	61749.36	78504.00	127133.31	9.7906325	9.8948918
9	61772.24	78551.03	127162.35	9.7907933	9.8951519
10	61795.11	78598.08	127191.42	9.7909541	9.8954119
11	61817.98	78645.15	127220.52	9.7911148	9.8956719
12	61840.84	78692.24	127249.63	9.7912754	9.8959319
13	61863.70	78739.35	127278.77	9.7914359	9.8961918
14	61886.55	78786.49	127307.94	9.7915963	9.8964517
15	61909.39	78833.64	127337.12	9.7917566	9.8967116
16	61932.24	78880.82	127366.34	9.7919168	9.8969714
17	61955.07	78928.02	127395.57	9.7920769	9.8972312
18	61977.90	78975.24	127424.84	9.7922369	9.8974910
19	62000.73	79022.48	127454.12	9.7923968	9.8977507
20	62023.55	79069.75	127483.43	9.7925566	9.8980104
21	62046.36	79117.03	127512.76	9.7927163	9.8982700
22	62069.17	79164.34	127542.12	9.7928760	9.8985296
23	62091.98	79211.67	127571.51	9.7930355	9.8987892
24	62114.78	79259.02	127600.91	9.7931949	9.8990487
25	62137.57	79306.40	127630.34	9.7933543	9.8993082
26	62160.36	79353.79	127659.80	9.7935135	9.8995677
27	62183.14	79401.21	127689.28	9.7936727	9.8998271
28	62205.92	79448.65	127718.78	9.7938317	9.9000865
29	62228.70	79496.11	127748.31	9.7939907	9.9003459
30	62251.46	79543.59	127777.87	9.7941496	9.9006052

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51 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	78801.08	127994.16	162426.92	9.8965321	10.1071902
59	78783.16	127917.45	162366.48	9.8964334	10.1069298
58	78765.24	127840.79	162306.09	9.8963346	10.1066694
57	78747.32	127764.19	162245.76	9.8962358	10.1064091
56	78729.39	127687.65	162185.49	9.8961369	10.1061489
55	78711.45	127611.16	162125.28	9.8960379	10.1058886
54	78693.50	127534.73	162065.13	9.8959389	10.1056285
53	78675.55	127458.35	162005.04	9.8958398	10.1053683
52	78657.59	127382.04	161945.00	9.8957406	10.1051082
51	78639.63	127305.78	161885.02	9.8956414	10.1048481
50	78621.65	127229.57	161825.10	9.8955422	10.1045881
49	78603.67	127153.42	161765.24	9.8954429	10.1043281
48	78585.69	127077.33	161705.44	9.8953435	10.1040681
47	78567.70	127001.30	161645.69	9.8952440	10.1038082
46	78549.70	126925.32	161586.00	9.8951445	10.1035483
45	78531.69	126849.39	161526.37	9.8950450	10.1032884
44	78513.68	126773.53	161466.80	9.8949453	10.1030286
43	78495.66	126697.72	161407.28	9.8948457	10.1027688
42	78477.64	126621.96	161347.83	9.8947459	10.1025090
41	78459.61	126546.26	161288.43	9.8946461	10.1022493
40	78441.57	126470.62	161229.08	9.8945463	10.1019896
39	78423.52	126395.03	161169.80	9.8944463	10.1017300
38	78405.47	126319.50	161110.57	9.8943464	10.1014704
37	78387.41	126244.02	161051.40	9.8942463	10.1012108
36	78369.35	126168.60	160992.28	9.8941462	10.1009513
35	78351.27	126093.23	160933.23	9.8940461	10.1006918
34	78333.20	126017.92	160874.23	9.8939458	10.1004323
33	78315.11	125942.67	160815.28	9.8938456	10.1001729
32	78297.02	125867.47	160756.40	9.8937452	10.0999135
31	78278.92	125792.32	160697.57	9.8936448	10.0996541
30	78260.82	125717.23	160638.79	9.8935444	10.0993948

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38 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	62251.46	79543.59	127777.87	9.7941496	9.9006052
31	62274.23	79591.10	127807.44	9.7943083	9.9008645
32	62296.98	79638.62	127837.05	9.7944670	9.9011237
33	62319.74	79686.17	127866.67	9.7946256	9.9013830
34	62342.48	79733.74	127896.32	9.7947841	9.9016422
35	62365.22	79781.34	127926.00	9.7949425	9.9019013
36	62387.96	79828.95	127955.70	9.7951008	9.9021604
37	62410.69	79876.59	127985.43	9.7952590	9.9024195
38	62433.42	79924.25	128015.18	9.7954171	9.9026786
39	62456.14	79971.93	128044.95	9.7955751	9.9029376
40	62478.85	80019.63	128074.75	9.7957330	9.9031966
41	62501.56	80067.36	128104.57	9.7958909	9.9034555
42	62524.27	80115.11	128134.42	9.7960486	9.9037144
43	62546.96	80162.88	128164.30	9.7962062	9.9039733
44	62569.66	80210.67	128194.20	9.7963638	9.9042321
45	62592.35	80258.49	128224.12	9.7965212	9.9044910
46	62615.03	80306.32	128254.07	9.7966786	9.9047497
47	62637.71	80354.18	128284.04	9.7968359	9.9050085
48	62660.38	80402.06	128314.04	9.7969930	9.9052672
49	62683.05	80449.97	128344.06	9.7971501	9.9055259
50	62705.71	80497.90	128374.11	9.7973071	9.9057845
51	62728.37	80545.84	128404.18	9.7974640	9.9060431
52	62751.02	80593.82	128434.28	9.7976208	9.9063017
53	62773.66	80641.81	128464.40	9.7977775	9.9065603
54	62796.31	80689.83	128494.55	9.7979341	9.9068188
55	62818.94	80737.87	128524.72	9.7980906	9.9070773
56	62841.57	80785.93	128554.92	9.7982470	9.9073357
57	62864.20	80834.01	128585.14	9.7984034	9.9075941
58	62886.82	80882.12	128615.39	9.7985596	9.9078525
59	62909.43	80930.25	128645.66	9.7987158	9.9081109
60	62932.04	80978.40	128675.96	9.7988718	9.9083692

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51 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	78260.82	125717.23	160638.79	9.8935444	10.0993948
29	78242.70	125642.19	160580.08	9.8934439	10.0991355
28	78224.59	125567.21	160521.42	9.8933433	10.0988763
27	78206.46	125492.29	160462.81	9.8932426	10.0986170
26	78188.33	125417.42	160404.26	9.8931419	10.0983578
25	78170.19	125342.60	160345.77	9.8930412	10.0980987
24	78152.05	125267.84	160287.34	9.8929404	10.0978396
23	78133.90	125193.13	160228.96	9.8928395	10.0975805
22	78115.74	125118.48	160170.64	9.8927385	10.0973214
21	78097.57	125043.88	160112.37	9.8926375	10.0970624
20	78079.40	124969.33	160054.16	9.8925365	10.0968034
19	78061.23	124894.84	159996.00	9.8924354	10.0965445
18	78043.04	124820.40	159937.90	9.8923342	10.0962856
17	78024.85	124746.02	159879.86	9.8922329	10.0960267
16	78006.65	124671.69	159821.87	9.8921316	10.0957679
15	77988.45	124597.42	159763.94	9.8920303	10.0955090
14	77970.24	124523.20	159706.06	9.8919289	10.0952503
13	77952.02	124449.03	159648.24	9.8918274	10.0949915
12	77933.80	124374.92	159590.48	9.8917258	10.0947328
11	77915.57	124300.86	159532.76	9.8916242	10.0944741
10	77897.33	124226.85	159475.11	9.8915226	10.0942155
9	77879.09	124152.90	159417.51	9.8914208	10.0939569
8	77860.84	124079.00	159359.96	9.8913191	10.0936983
7	77842.58	124005.15	159302.47	9.8912172	10.0934397
6	77824.31	123931.36	159245.04	9.8911153	10.0931812
5	77806.04	123857.62	159187.66	9.8910133	10.0929227
4	77787.77	123783.93	159130.33	9.8909113	10.0926643
3	77769.49	123710.30	159073.06	9.8908092	10.0924059
2	77751.20	123636.72	159015.84	9.8907071	10.0921475
1	77732.90	123563.19	158958.68	9.8906049	10.0918891
0	77714.60	123489.72	158901.57	9.8905026	10.0916308

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39 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	62932.04	80978.40	128675.96	9.7988718	9.9083692
1	62954.64	81026.58	128706.28	9.7990278	9.9086275
2	62977.24	81074.78	128736.63	9.7991836	9.9088858
3	62999.83	81123.00	128767.00	9.7993394	9.9091440
4	63022.42	81171.24	128797.40	9.7994951	9.9094022
5	63045.00	81219.51	128827.82	9.7996507	9.9096603
6	63067.58	81267.80	128858.27	9.7998062	9.9099185
7	63090.15	81316.11	128888.75	9.7999616	9.9101766
8	63112.72	81364.44	128919.25	9.8001169	9.9104347
9	63135.28	81412.80	128949.77	9.8002721	9.9106927
10	63157.84	81461.18	128980.32	9.8004272	9.9109507
11	63180.39	81509.58	129010.90	9.8005823	9.9112087
12	63202.93	81558.01	129041.50	9.8007372	9.9114666
13	63225.47	81606.46	129072.13	9.8008921	9.9117245
14	63248.00	81654.93	129102.78	9.8010468	9.9119824
15	63270.53	81703.43	129133.46	9.8012015	9.9122403
16	63293.06	81751.95	129164.16	9.8013561	9.9124981
17	63315.57	81800.49	129194.89	9.8015106	9.9127559
18	63338.09	81849.05	129225.64	9.8016649	9.9130137
19	63360.59	81897.64	129256.42	9.8018192	9.9132714
20	63383.10	81946.25	129287.23	9.8019735	9.9135291
21	63405.59	81994.88	129318.06	9.8021276	9.9137868
22	63428.08	82043.54	129348.92	9.8022816	9.9140444
23	63450.57	82092.22	129379.80	9.8024355	9.9143020
24	63473.05	82140.93	129410.71	9.8025894	9.9145596
25	63495.53	82189.65	129441.64	9.8027431	9.9148171
26	63518.00	82238.40	129472.60	9.8028968	9.9150747
27	63540.46	82287.18	129503.59	9.8030504	9.9153322
28	63562.92	82335.97	129534.60	9.8032038	9.9155896
29	63585.37	82384.79	129565.64	9.8033572	9.9158471
30	63607.82	82433.64	129596.70	9.8035105	9.9161045

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50 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	77714.60	123489.72	158901.57	9.8905026	10.0916308
59	77696.29	123416.29	158844.52	9.8904003	10.0913725
58	77677.97	123342.92	158787.52	9.8902979	10.0911142
57	77659.65	123269.61	158730.58	9.8901954	10.0908560
56	77641.32	123196.34	158673.69	9.8900929	10.0905978
55	77622.98	123123.13	158616.85	9.8899903	10.0903397
54	77604.64	123049.97	158560.07	9.8898877	10.0900815
53	77586.29	122976.87	158503.34	9.8897850	10.0898234
52	77567.94	122903.81	158446.67	9.8896822	10.0895653
51	77549.57	122830.81	158390.05	9.8895794	10.0893073
50	77531.21	122757.86	158333.48	9.8894765	10.0890493
49	77512.83	122684.96	158276.97	9.8893736	10.0887913
48	77494.45	122612.11	158220.51	9.8892706	10.0885334
47	77476.06	122539.32	158164.11	9.8891675	10.0882755
46	77457.67	122466.58	158107.76	9.8890644	10.0880176
45	77439.26	122393.89	158051.46	9.8889612	10.0877597
44	77420.86	122321.25	157995.21	9.8888580	10.0875019
43	77402.44	122248.66	157939.02	9.8887547	10.0872441
42	77384.02	122176.13	157882.89	9.8886513	10.0869863
41	77365.59	122103.64	157826.80	9.8885479	10.0867286
40	77347.16	122031.21	157770.77	9.8884444	10.0864709
39	77328.72	121958.83	157714.79	9.8883408	10.0862132
38	77310.27	121886.50	157658.87	9.8882372	10.0859556
37	77291.82	121814.22	157603.00	9.8881335	10.0856980
36	77273.36	121741.99	157547.18	9.8880298	10.0854404
35	77254.89	121669.82	157491.41	9.8879260	10.0851829
34	77236.42	121597.69	157435.70	9.8878221	10.0849253
33	77217.94	121525.62	157380.04	9.8877182	10.0846678
32	77199.45	121453.59	157324.43	9.8876142	10.0844104
31	77180.96	121381.62	157268.87	9.8875102	10.0841529
30	77162.46	121309.70	157213.37	9.8874061	10.0838955

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39 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	63607.82	82433.64	129596.70	9.8035105	9.9161045
31	63630.26	82482.51	129627.79	9.8036637	9.9163618
32	63652.70	82531.40	129658.90	9.8038168	9.9166192
33	63675.13	82580.31	129690.04	9.8039699	9.9168765
34	63697.56	82629.25	129721.21	9.8041228	9.9171338
35	63719.98	82678.21	129752.40	9.8042757	9.9173911
36	63742.40	82727.19	129783.62	9.8044284	9.9176483
37	63764.81	82776.20	129814.87	9.8045811	9.9179055
38	63787.21	82825.23	129846.14	9.8047336	9.9181627
39	63809.61	82874.29	129877.43	9.8048861	9.9184198
40	63832.01	82923.37	129908.76	9.8050385	9.9186769
41	63854.40	82972.47	129940.11	9.8051908	9.9189340
42	63876.78	83021.60	129971.48	9.8053430	9.9191911
43	63899.16	83070.75	130002.88	9.8054951	9.9194481
44	63921.53	83119.92	130034.31	9.8056472	9.9197051
45	63943.90	83169.12	130065.76	9.8057991	9.9199621
46	63966.26	83218.34	130097.24	9.8059510	9.9202191
47	63988.62	83267.59	130128.75	9.8061027	9.9204760
48	64010.97	83316.86	130160.28	9.8062544	9.9207329
49	64033.32	83366.15	130191.84	9.8064060	9.9209898
50	64055.66	83415.47	130223.43	9.8065575	9.9212466
51	64077.99	83464.81	130255.04	9.8067089	9.9215034
52	64100.32	83514.18	130286.67	9.8068602	9.9217602
53	64122.64	83563.57	130318.34	9.8070114	9.9220170
54	64144.96	83612.98	130350.03	9.8071626	9.9222737
55	64167.28	83662.42	130381.75	9.8073136	9.9225304
56	64189.58	83711.88	130413.49	9.8074646	9.9227871
57	64211.89	83761.36	130445.26	9.8076154	9.9230437
58	64234.18	83810.87	130477.06	9.8077662	9.9233004
59	64256.47	83860.41	130508.88	9.8079169	9.9235570
60	64278.76	83909.96	130540.73	9.8080675	9.9238135

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50 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	77162.46	121309.70	157213.37	9.8874061	10.0838955
29	77143.95	121237.83	157157.92	9.8873019	10.0836382
28	77125.44	121166.01	157102.52	9.8871977	10.0833808
27	77106.92	121094.24	157047.17	9.8870934	10.0831235
26	77088.40	121022.52	156991.88	9.8869890	10.0828662
25	77069.86	120950.85	156936.64	9.8868846	10.0826089
24	77051.32	120879.24	156881.45	9.8867801	10.0823517
23	77032.78	120807.67	156826.31	9.8866756	10.0820945
22	77014.23	120736.15	156771.23	9.8865710	10.0818373
21	76995.67	120664.68	156716.19	9.8864663	10.0815802
20	76977.10	120593.27	156661.21	9.8863616	10.0813231
19	76958.53	120521.90	156606.28	9.8862568	10.0810660
18	76939.96	120450.58	156551.41	9.8861519	10.0808089
17	76921.37	120379.32	156496.58	9.8860470	10.0805519
16	76902.78	120308.10	156441.81	9.8859420	10.0802949
15	76884.18	120236.93	156387.08	9.8858370	10.0800379
14	76865.58	120165.81	156332.41	9.8857319	10.0797809
13	76846.97	120094.75	156277.79	9.8856267	10.0795240
12	76828.35	120023.73	156223.22	9.8855215	10.0792671
11	76809.73	119952.76	156168.71	9.8854162	10.0790102
10	76791.10	119881.84	156114.24	9.8853109	10.0787534
9	76772.46	119810.97	156059.82	9.8852055	10.0784966
8	76753.82	119740.15	156005.46	9.8851000	10.0782398
7	76735.17	119669.38	155951.15	9.8849945	10.0779830
6	76716.52	119598.66	155896.89	9.8848889	10.0777263
5	76697.85	119527.99	155842.68	9.8847832	10.0774696
4	76679.18	119457.36	155788.52	9.8846775	10.0772129
3	76660.51	119386.79	155734.41	9.8845717	10.0769563
2	76641.83	119316.26	155680.35	9.8844659	10.0766996
1	76623.14	119245.79	155626.34	9.8843599	10.0764430
0	76604.44	119175.36	155572.38	9.8842540	10.0761865

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40 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	64278.76	83909.96	130540.73	9.8080675	9.9238135
1	64301.04	83959.55	130572.61	9.8082180	9.9240701
2	64323.32	84009.15	130604.51	9.8083684	9.9243266
3	64345.59	84058.78	130636.44	9.8085188	9.9245831
4	64367.85	84108.44	130668.39	9.8086690	9.9248396
5	64390.11	84158.12	130700.38	9.8088192	9.9250960
6	64412.36	84207.82	130732.39	9.8089692	9.9253524
7	64434.61	84257.55	130764.42	9.8091192	9.9256088
8	64456.85	84307.30	130796.49	9.8092691	9.9258652
9	64479.09	84357.08	130828.58	9.8094189	9.9261215
10	64501.32	84406.88	130860.69	9.8095686	9.9263778
11	64523.55	84456.70	130892.84	9.8097182	9.9266341
12	64545.77	84506.55	130925.01	9.8098678	9.9268904
13	64567.98	84556.43	130957.20	9.8100172	9.9271466
14	64590.19	84606.33	130989.43	9.8101666	9.9274028
15	64612.40	84656.25	131021.68	9.8103159	9.9276590
16	64634.60	84706.20	131053.96	9.8104650	9.9279152
17	64656.79	84756.17	131086.26	9.8106141	9.9281713
18	64678.98	84806.17	131118.60	9.8107631	9.9284274
19	64701.16	84856.19	131150.95	9.8109121	9.9286835
20	64723.34	84906.24	131183.34	9.8110609	9.9289396
21	64745.51	84956.31	131215.75	9.8112096	9.9291956
22	64767.67	85006.40	131248.20	9.8113583	9.9294516
23	64789.84	85056.53	131280.66	9.8115069	9.9297076
24	64811.99	85106.67	131313.16	9.8116554	9.9299636
25	64834.14	85156.84	131345.68	9.8118038	9.9302195
26	64856.28	85207.04	131378.23	9.8119521	9.9304755
27	64878.42	85257.26	131410.81	9.8121003	9.9307314
28	64900.56	85307.50	131443.41	9.8122484	9.9309872
29	64922.68	85357.77	131476.04	9.8123965	9.9312431
30	64944.80	85408.07	131508.70	9.8125444	9.9314989

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49 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	76604.44	119175.36	155572.38	9.8842540	10.0761865
59	76585.74	119104.98	155518.48	9.8841479	10.0759299
58	76567.04	119034.65	155464.62	9.8840418	10.0756734
57	76548.32	118964.37	155410.81	9.8839357	10.0754169
56	76529.60	118894.14	155357.06	9.8838294	10.0751604
55	76510.87	118823.95	155303.35	9.8837232	10.0749040
54	76492.14	118753.82	155249.70	9.8836168	10.0746476
53	76473.40	118683.73	155196.10	9.8835104	10.0743912
52	76454.65	118613.69	155142.54	9.8834039	10.0741348
51	76435.90	118543.70	155089.04	9.8832974	10.0738785
50	76417.14	118473.76	155035.58	9.8831908	10.0736222
49	76398.38	118403.87	154982.18	9.8830841	10.0733659
48	76379.60	118334.02	154928.82	9.8829774	10.0731096
47	76360.82	118264.22	154875.52	9.8828706	10.0728534
46	76342.04	118194.47	154822.26	9.8827638	10.0725972
45	76323.25	118124.77	154769.06	9.8826568	10.0723410
44	76304.45	118055.12	154715.90	9.8825499	10.0720848
43	76285.64	117985.51	154662.80	9.8824428	10.0718287
42	76266.83	117915.95	154609.74	9.8823357	10.0715726
41	76248.02	117846.44	154556.73	9.8822285	10.0713165
40	76229.19	117776.98	154503.78	9.8821213	10.0710604
39	76210.36	117707.56	154450.87	9.8820140	10.0708044
38	76191.52	117638.20	154398.01	9.8819067	10.0705484
37	76172.68	117568.88	154345.20	9.8817992	10.0702924
36	76153.83	117499.60	154292.44	9.8816918	10.0700364
35	76134.97	117430.38	154239.73	9.8815842	10.0697805
34	76116.11	117361.20	154187.06	9.8814766	10.0695245
33	76097.24	117292.07	154134.45	9.8813689	10.0692686
32	76078.37	117222.98	154081.89	9.8812612	10.0690128
31	76059.49	117153.95	154029.37	9.8811534	10.0687569
30	76040.60	117084.96	153976.90	9.8810455	10.0685011

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40 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	64944.80	85408.07	131508.70	9.8125444	9.9314989
31	64966.92	85458.39	131541.39	9.8126923	9.9317547
32	64989.03	85508.73	131574.10	9.8128401	9.9320105
33	65011.14	85559.10	131606.84	9.8129878	9.9322662
34	65033.24	85609.50	131639.61	9.8131354	9.9325220
35	65055.33	85659.92	131672.40	9.8132829	9.9327777
36	65077.42	85710.37	131705.23	9.8134303	9.9330334
37	65099.51	85760.84	131738.08	9.8135777	9.9332890
38	65121.58	85811.33	131770.96	9.8137250	9.9335446
39	65143.66	85861.85	131803.86	9.8138721	9.9338003
40	65165.72	85912.40	131836.80	9.8140192	9.9340559
41	65187.78	85962.97	131869.76	9.8141662	9.9343114
42	65209.84	86013.57	131902.74	9.8143131	9.9345670
43	65231.89	86064.19	131935.76	9.8144600	9.9348225
44	65253.94	86114.84	131968.81	9.8146067	9.9350780
45	65275.98	86165.51	132001.88	9.8147534	9.9353335
46	65298.01	86216.21	132034.98	9.8148999	9.9355889
47	65320.04	86266.94	132068.10	9.8150464	9.9358444
48	65342.06	86317.68	132101.26	9.8151928	9.9360998
49	65364.08	86368.46	132134.44	9.8153391	9.9363552
50	65386.09	86419.26	132167.65	9.8154854	9.9366105
51	65408.10	86470.09	132200.89	9.8156315	9.9368659
52	65430.10	86520.94	132234.16	9.8157776	9.9371212
53	65452.09	86571.81	132267.45	9.8159235	9.9373765
54	65474.08	86622.72	132300.78	9.8160694	9.9376318
55	65496.07	86673.65	132334.13	9.8162152	9.9378871
56	65518.04	86724.60	132367.50	9.8163609	9.9381423
57	65540.02	86775.58	132400.91	9.8165066	9.9383975
58	65561.98	86826.59	132434.35	9.8166521	9.9386527
59	65583.95	86877.62	132467.81	9.8167975	9.9389079
60	65605.90	86928.67	132501.30	9.8169429	9.9391631

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49 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	76040.60	117084.96	153976.90	9.8810455	10.0685011
29	76021.70	117016.01	153924.49	9.8809376	10.0682453
28	76002.80	116947.12	153872.12	9.8808296	10.0679895
27	75983.89	116878.27	153819.80	9.8807215	10.0677338
26	75964.98	116809.47	153767.52	9.8806134	10.0674780
25	75946.06	116740.71	153715.30	9.8805052	10.0672223
24	75927.13	116672.00	153663.13	9.8803970	10.0669666
23	75908.20	116603.34	153611.00	9.8802887	10.0667110
22	75889.26	116534.72	153558.92	9.8801803	10.0664554
21	75870.31	116466.15	153506.89	9.8800719	10.0661997
20	75851.36	116397.63	153454.91	9.8799634	10.0659441
19	75832.40	116329.16	153402.97	9.8798548	10.0656886
18	75813.43	116260.73	153351.09	9.8797462	10.0654330
17	75794.46	116192.34	153299.25	9.8796375	10.0651775
16	75775.48	116124.00	153247.46	9.8795287	10.0649220
15	75756.50	116055.71	153195.72	9.8794199	10.0646665
14	75737.51	115987.47	153144.03	9.8793110	10.0644111
13	75718.51	115919.27	153092.38	9.8792021	10.0641556
12	75699.51	115851.12	153040.78	9.8790930	10.0639002
11	75680.50	115783.01	152989.23	9.8789840	10.0636448
10	75661.48	115714.95	152937.73	9.8788748	10.0633895
9	75642.46	115646.93	152886.27	9.8787656	10.0631341
8	75623.43	115578.96	152834.87	9.8786563	10.0628788
7	75604.39	115511.04	152783.51	9.8785470	10.0626235
6	75585.35	115443.16	152732.19	9.8784376	10.0623682
5	75566.30	115375.32	152680.93	9.8783281	10.0621129
4	75547.24	115307.54	152629.71	9.8782186	10.0618577
3	75528.18	115239.79	152578.54	9.8781090	10.0616025
2	75509.11	115172.10	152527.41	9.8779994	10.0613473
1	75490.04	115104.45	152476.34	9.8778896	10.0610921
0	75470.96	115036.84	152425.31	9.8777799	10.0608369

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41 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	65605.90	86928.67	132501.30	9.8169429	9.9391631
1	65627.85	86979.76	132534.82	9.8170882	9.9394182
2	65649.80	87030.87	132568.37	9.8172334	9.9396733
3	65671.74	87082.00	132601.94	9.8173785	9.9399284
4	65693.67	87133.16	132635.54	9.8175235	9.9401835
5	65715.60	87184.35	132669.18	9.8176685	9.9404385
6	65737.52	87235.56	132702.84	9.8178133	9.9406936
7	65759.44	87286.80	132736.53	9.8179581	9.9409486
8	65781.35	87338.06	132770.24	9.8181028	9.9412036
9	65803.26	87389.35	132803.99	9.8182474	9.9414585
10	65825.16	87440.67	132837.76	9.8183919	9.9417135
11	65847.06	87492.01	132871.56	9.8185364	9.9419684
12	65868.95	87543.38	132905.39	9.8186807	9.9422233
13	65890.83	87594.78	132939.25	9.8188250	9.9424782
14	65912.71	87646.20	132973.14	9.8189692	9.9427331
15	65934.58	87697.65	133007.06	9.8191133	9.9429879
16	65956.45	87749.12	133041.00	9.8192573	9.9432428
17	65978.31	87800.62	133074.97	9.8194012	9.9434976
18	66000.17	87852.15	133108.97	9.8195450	9.9437524
19	66022.02	87903.70	133143.01	9.8196888	9.9440072
20	66043.86	87955.28	133177.07	9.8198325	9.9442619
21	66065.70	88006.88	133211.15	9.8199761	9.9445166
22	66087.54	88058.52	133245.27	9.8201196	9.9447714
23	66109.36	88110.17	133279.42	9.8202630	9.9450261
24	66131.19	88161.86	133313.59	9.8204063	9.9452807
25	66153.00	88213.57	133347.79	9.8205496	9.9455354
26	66174.82	88265.31	133382.03	9.8206927	9.9457900
27	66196.62	88317.07	133416.29	9.8208358	9.9460447
28	66218.42	88368.86	133450.58	9.8209788	9.9462993
29	66240.22	88420.68	133484.89	9.8211217	9.9465539
30	66262.01	88472.53	133519.24	9.8212646	9.9468084

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48 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
60	75470.96	115036.84	152425.31	9.8777799	10.0608369
59	75451.87	114969.28	152374.33	9.8776700	10.0605818
58	75432.78	114901.76	152323.39	9.8775601	10.0603267
57	75413.68	114834.29	152272.50	9.8774501	10.0600716
56	75394.57	114766.87	152221.66	9.8773401	10.0598165
55	75375.46	114699.49	152170.87	9.8772300	10.0595615
54	75356.34	114632.15	152120.12	9.8771198	10.0593064
53	75337.21	114564.86	152069.42	9.8770096	10.0590514
52	75318.08	114497.62	152018.76	9.8768993	10.0587964
51	75298.94	114430.41	151968.15	9.8767889	10.0585415
50	75279.80	114363.26	151917.59	9.8766785	10.0582865
49	75260.65	114296.15	151867.08	9.8765680	10.0580316
48	75241.49	114229.08	151816.61	9.8764574	10.0577767
47	75222.33	114162.06	151766.19	9.8763468	10.0575218
46	75203.16	114095.08	151715.81	9.8762361	10.0572669
45	75183.98	114028.15	151665.48	9.8761253	10.0570121
44	75164.80	113961.26	151615.20	9.8760145	10.0567572
43	75145.61	113894.41	151564.96	9.8759036	10.0565024
42	75126.41	113827.61	151514.77	9.8757927	10.0562476
41	75107.21	113760.86	151464.62	9.8756816	10.0559928
40	75088.00	113694.14	151414.52	9.8755706	10.0557381
39	75068.79	113627.47	151364.47	9.8754594	10.0554834
38	75049.57	113560.85	151314.46	9.8753482	10.0552286
37	75030.34	113494.27	151264.50	9.8752369	10.0549739
36	75011.11	113427.73	151214.59	9.8751256	10.0547193
35	74991.87	113361.24	151164.72	9.8750142	10.0544646
34	74972.62	113294.79	151114.89	9.8749027	10.0542100
33	74953.37	113228.39	151065.11	9.8747912	10.0539553
32	74934.11	113162.03	151015.38	9.8746795	10.0537007
31	74914.84	113095.71	150965.69	9.8745679	10.0534461
30	74895.57	113029.44	150916.05	9.8744561	10.0531916

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41 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	66262.00	88472.53	133519.24	9.8212646	9.9468084
31	66283.79	88524.40	133553.62	9.8214073	9.9470630
32	66305.57	88576.30	133588.02	9.8215500	9.9473175
33	66327.34	88628.22	133622.46	9.8216926	9.9475720
34	66349.10	88680.17	133656.92	9.8218351	9.9478265
35	66370.87	88732.15	133691.41	9.8219775	9.9480810
36	66392.62	88784.15	133725.94	9.8221198	9.9483355
37	66414.37	88836.19	133760.49	9.8222621	9.9485899
38	66436.12	88888.25	133795.07	9.8224042	9.9488443
39	66457.85	88940.33	133829.68	9.8225463	9.9490987
40	66479.59	88992.44	133864.32	9.8226883	9.9493531
41	66501.31	89044.58	133898.98	9.8228302	9.9496075
42	66523.04	89096.75	133933.69	9.8229721	9.9498619
43	66544.75	89148.94	133968.41	9.8231138	9.9501162
44	66566.46	89201.16	134003.17	9.8232555	9.9503705
45	66588.17	89253.41	134037.95	9.8233971	9.9506248
46	66609.87	89305.69	134072.76	9.8235386	9.9508791
47	66631.56	89357.99	134107.61	9.8236800	9.9511334
48	66653.25	89410.32	134142.48	9.8238213	9.9513876
49	66674.93	89462.68	134177.38	9.8239626	9.9516419
50	66696.61	89515.06	134212.32	9.8241037	9.9518961
51	66718.28	89567.47	134247.28	9.8242448	9.9521503
52	66739.94	89619.91	134282.27	9.8243858	9.9524045
53	66761.60	89672.38	134317.29	9.8245267	9.9526587
54	66783.26	89724.87	134352.34	9.8246676	9.9529128
55	66804.90	89777.39	134387.42	9.8248083	9.9531670
56	66826.55	89829.94	134422.53	9.8249490	9.9534211
57	66848.18	89882.51	134457.67	9.8250896	9.9536752
58	66869.81	89935.12	134492.84	9.8252301	9.9539293
59	66891.44	89987.75	134528.04	9.8253705	9.9541834
60	66913.06	90040.40	134563.27	9.8255109	9.9544374

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48 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	74895.57	113029.44	150916.05	9.8744561	10.0531916
29	74876.29	112963.21	150866.45	9.8743443	10.0529370
28	74857.01	112897.02	150816.90	9.8742325	10.0526825
27	74837.72	112830.88	150767.39	9.8741205	10.0524280
26	74818.42	112764.78	150717.93	9.8740085	10.0521735
25	74799.12	112698.72	150668.52	9.8738965	10.0519190
24	74779.81	112632.71	150619.15	9.8737844	10.0516645
23	74760.49	112566.74	150569.82	9.8736722	10.0514101
22	74741.17	112500.81	150520.54	9.8735599	10.0511557
21	74721.84	112434.93	150471.31	9.8734476	10.0509013
20	74702.51	112369.09	150422.11	9.8733352	10.0506469
19	74683.17	112303.29	150372.97	9.8732227	10.0503925
18	74663.82	112237.54	150323.87	9.8731102	10.0501381
17	74644.46	112171.83	150274.81	9.8729976	10.0498838
16	74625.10	112106.16	150225.80	9.8728849	10.0496295
15	74605.74	112040.53	150176.83	9.8727722	10.0493752
14	74586.36	111974.95	150127.91	9.8726594	10.0491209
13	74566.99	111909.41	150079.03	9.8725466	10.0488666
12	74547.60	111843.91	150030.20	9.8724337	10.0486124
11	74528.21	111778.46	149981.41	9.8723207	10.0483581
10	74508.81	111713.05	149932.67	9.8722076	10.0481039
9	74489.41	111647.68	149883.97	9.8720945	10.0478497
8	74469.99	111582.35	149835.31	9.8719813	10.0475955
7	74450.58	111517.06	149786.70	9.8718681	10.0473413
6	74431.15	111451.82	149738.13	9.8717548	10.0470872
5	74411.73	111386.62	149689.61	9.8716414	10.0468330
4	74392.29	111321.46	149641.13	9.8715279	10.0465789
3	74372.85	111256.35	149592.70	9.8714144	10.0463248
2	74353.40	111191.27	149544.31	9.8713008	10.0460707
1	74333.94	111126.24	149495.96	9.8711872	10.0458166
0	74314.48	111061.25	149447.65	9.8710735	10.0455626

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42 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
0	66913.06	90040.40	134563.27	9.8255109	9.9544374
1	66934.68	90093.09	134598.53	9.8256512	9.9546915
2	66956.28	90145.80	134633.82	9.8257913	9.9549455
3	66977.89	90198.54	134669.14	9.8259314	9.9551995
4	66999.48	90251.31	134704.49	9.8260715	9.9554535
5	67021.08	90304.11	134739.87	9.8262114	9.9557075
6	67042.66	90356.93	134775.28	9.8263512	9.9559615
7	67064.24	90409.79	134810.72	9.8264910	9.9562154
8	67085.82	90462.67	134846.19	9.8266307	9.9564694
9	67107.39	90515.57	134881.68	9.8267703	9.9567233
10	67128.95	90568.51	134917.21	9.8269098	9.9569772
11	67150.51	90621.47	134952.77	9.8270493	9.9572311
12	67172.06	90674.46	134988.36	9.8271887	9.9574850
13	67193.61	90727.48	135023.98	9.8273279	9.9577389
14	67215.15	90780.53	135059.63	9.8274671	9.9579927
15	67236.68	90833.60	135095.31	9.8276063	9.9582465
16	67258.21	90886.71	135131.02	9.8277453	9.9585004
17	67279.73	90939.84	135166.77	9.8278843	9.9587542
18	67301.25	90993.00	135202.54	9.8280231	9.9590080
19	67322.76	91046.19	135238.34	9.8281619	9.9592618
20	67344.27	91099.40	135274.17	9.8283006	9.9595155
21	67365.77	91152.65	135310.03	9.8284393	9.9597693
22	67387.27	91205.92	135345.93	9.8285778	9.9600230
23	67408.76	91259.22	135381.85	9.8287163	9.9602767
24	67430.24	91312.55	135417.80	9.8288547	9.9605305
25	67451.72	91365.91	135453.79	9.8289930	9.9607842
26	67473.19	91419.29	135489.80	9.8291312	9.9610378
27	67494.66	91472.70	135525.85	9.8292694	9.9612915
28	67516.12	91526.15	135561.93	9.8294075	9.9615452
29	67537.57	91579.62	135598.03	9.8295454	9.9617988
30	67559.02	91633.12	135634.17	9.8296833	9.9620525

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47 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	74314.48	111061.25	149447.65	9.8710735	10.0455626
59	74295.02	110996.30	149399.40	9.8709597	10.0453085
58	74275.54	110931.40	149351.18	9.8708458	10.0450545
57	74256.06	110866.53	149303.01	9.8707319	10.0448005
56	74236.58	110801.71	149254.88	9.8706179	10.0445465
55	74217.08	110736.93	149206.80	9.8705039	10.0442925
54	74197.58	110672.19	149158.76	9.8703898	10.0440385
53	74178.08	110607.50	149110.76	9.8702756	10.0437846
52	74158.57	110542.84	149062.80	9.8701613	10.0435306
51	74139.05	110478.23	149014.89	9.8700470	10.0432767
50	74119.53	110413.65	148967.03	9.8699326	10.0430228
49	74100.00	110349.12	148919.20	9.8698182	10.0427689
48	74080.46	110284.63	148871.42	9.8697037	10.0425150
47	74060.92	110220.19	148823.69	9.8695891	10.0422611
46	74041.37	110155.78	148775.99	9.8694744	10.0420073
45	74021.81	110091.41	148728.34	9.8693597	10.0417535
44	74002.25	110027.09	148680.73	9.8692449	10.0414996
43	73982.68	109962.81	148633.17	9.8691301	10.0412458
42	73963.11	109898.57	148585.65	9.8690152	10.0409920
41	73943.53	109834.36	148538.17	9.8689002	10.0407382
40	73923.94	109770.20	148490.73	9.8687851	10.0404845
39	73904.35	109706.09	148443.34	9.8686700	10.0402307
38	73884.75	109642.01	148395.99	9.8685548	10.0399770
37	73865.15	109577.97	148348.68	9.8684396	10.0397233
36	73845.53	109513.97	148301.42	9.8683242	10.0394695
35	73825.92	109450.02	148254.20	9.8682088	10.0392158
34	73806.29	109386.10	148207.02	9.8680934	10.0389622
33	73786.66	109322.23	148159.88	9.8679779	10.0387085
32	73767.03	109258.40	148112.78	9.8678623	10.0384548
31	73747.38	109194.60	148065.73	9.8677466	10.0382012
30	73727.73	109130.85	148018.72	9.8676309	10.0379475

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42 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	67559.02	91633.12	135634.17	9.8296833	9.9620525
31	67580.46	91686.65	135670.34	9.8298212	9.9623061
32	67601.90	91740.20	135706.54	9.8299589	9.9625597
33	67623.33	91793.79	135742.77	9.8300966	9.9628133
34	67644.76	91847.40	135779.03	9.8302342	9.9630669
35	67666.18	91901.04	135815.32	9.8303717	9.9633204
36	67687.60	91954.71	135851.64	9.8305091	9.9635740
37	67709.01	92008.41	135888.00	9.8306464	9.9638275
38	67730.41	92062.14	135924.38	9.8307837	9.9640811
39	67751.81	92115.90	135960.80	9.8309209	9.9643346
40	67773.20	92169.69	135997.25	9.8310580	9.9645881
41	67794.59	92223.50	136033.72	9.8311950	9.9648416
42	67815.97	92277.34	136070.23	9.8313320	9.9650951
43	67837.34	92331.22	136106.77	9.8314688	9.9653486
44	67858.71	92385.12	136143.34	9.8316056	9.9656020
45	67880.07	92439.05	136179.95	9.8317423	9.9658555
46	67901.43	92493.01	136216.58	9.8318789	9.9661089
47	67922.78	92547.00	136253.24	9.8320155	9.9663623
48	67944.13	92601.02	136289.94	9.8321519	9.9666157
49	67965.47	92655.06	136326.67	9.8322883	9.9668692
50	67986.81	92709.14	136363.43	9.8324246	9.9671225
51	68008.13	92763.24	136400.22	9.8325609	9.9673759
52	68029.46	92817.38	136437.04	9.8326970	9.9676293
53	68050.78	92871.54	136473.89	9.8328331	9.9678827
54	68072.09	92925.73	136510.78	9.8329691	9.9681360
55	68093.39	92979.96	136547.70	9.8331050	9.9683893
56	68114.69	93034.21	136584.64	9.8332408	9.9686427
57	68135.99	93088.49	136621.62	9.8333766	9.9688960
58	68157.28	93142.80	136658.63	9.8335122	9.9691493
59	68178.56	93197.14	136695.67	9.8336478	9.9694026
60	68199.84	93251.51	136732.75	9.8337833	9.9696559

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47 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	73727.73	109130.85	148018.72	9.8676309	10.0379475
29	73708.08	109067.14	147971.76	9.8675151	10.0376939
28	73688.42	109003.47	147924.83	9.8673992	10.0374403
27	73668.75	108939.84	147877.95	9.8672833	10.0371867
26	73649.08	108876.24	147831.11	9.8671673	10.0369331
25	73629.40	108812.69	147784.31	9.8670512	10.0366796
24	73609.71	108749.18	147737.55	9.8669351	10.0364260
23	73590.02	108685.71	147690.84	9.8668189	10.0361725
22	73570.32	108622.28	147644.17	9.8667026	10.0359189
21	73550.61	108558.89	147597.54	9.8665863	10.0356654
20	73530.90	108495.54	147550.95	9.8664699	10.0354119
19	73511.18	108432.23	147504.40	9.8663534	10.0351584
18	73491.46	108368.96	147457.90	9.8662369	10.0349049
17	73471.73	108305.73	147411.44	9.8661203	10.0346514
16	73451.99	108242.54	147365.02	9.8660036	10.0343980
15	73432.25	108179.39	147318.64	9.8658868	10.0341445
14	73412.50	108116.28	147272.30	9.8657700	10.0338911
13	73392.75	108053.21	147226.00	9.8656531	10.0336377
12	73372.99	107990.18	147179.75	9.8655362	10.0333843
11	73353.22	107927.18	147133.54	9.8654192	10.0331308
10	73333.45	107864.23	147087.36	9.8653021	10.0328775
9	73313.67	107801.32	147041.23	9.8651849	10.0326241
8	73293.88	107738.45	146995.14	9.8650677	10.0323707
7	73274.09	107675.61	146949.10	9.8649504	10.0321173
6	73254.29	107612.82	146903.09	9.8648331	10.0318640
5	73234.49	107550.06	146857.13	9.8647156	10.0316107
4	73214.67	107487.34	146811.20	9.8645981	10.0313573
3	73194.86	107424.67	146765.32	9.8644806	10.0311040
2	73175.03	107362.03	146719.48	9.8643629	10.0308507
1	73155.21	107299.43	146673.68	9.8642452	10.0305974
0	73135.37	107236.87	146627.92	9.8641275	10.0303441

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43 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	68199.84	93251.51	136732.75	9.8337833	9.9696559
1	68221.11	93305.91	136769.85	9.8339188	9.9699091
2	68242.37	93360.34	136806.99	9.8340541	9.9701624
3	68263.63	93414.79	136844.16	9.8341894	9.9704157
4	68284.89	93469.28	136881.36	9.8343246	9.9706689
5	68306.13	93523.80	136918.59	9.8344597	9.9709221
6	68327.38	93578.34	136955.86	9.8345948	9.9711754
7	68348.61	93632.92	136993.15	9.8347297	9.9714286
8	68369.84	93687.53	137030.48	9.8348646	9.9716818
9	68391.07	93742.16	137067.84	9.8349994	9.9719350
10	68412.29	93796.83	137105.23	9.8351341	9.9721882
11	68433.50	93851.53	137142.66	9.8352688	9.9724413
12	68454.71	93906.25	137180.11	9.8354033	9.9726945
13	68475.91	93961.01	137217.60	9.8355378	9.9729477
14	68497.11	94015.79	137255.12	9.8356722	9.9732008
15	68518.30	94070.61	137292.68	9.8358066	9.9734539
16	68539.48	94125.45	137330.26	9.8359408	9.9737071
17	68560.66	94180.33	137367.88	9.8360750	9.9739602
18	68581.84	94235.23	137405.53	9.8362091	9.9742133
19	68603.00	94290.17	137443.21	9.8363431	9.9744664
20	68624.16	94345.13	137480.92	9.8364771	9.9747195
21	68645.32	94400.13	137518.67	9.8366109	9.9749726
22	68666.47	94455.16	137556.45	9.8367447	9.9752257
23	68687.61	94510.21	137594.26	9.8368784	9.9754787
24	68708.75	94565.30	137632.10	9.8370121	9.9757318
25	68729.88	94620.42	137669.98	9.8371456	9.9759849
26	68751.01	94675.56	137707.89	9.8372791	9.9762379
27	68772.13	94730.74	137745.83	9.8374125	9.9764909
28	68793.25	94785.95	137783.80	9.8375458	9.9767440
29	68814.35	94841.19	137821.81	9.8376790	9.9769970
30	68835.46	94896.46	137859.85	9.8378122	9.9772500

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46 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	73135.37	107236.87	146627.92	9.8641275	10.0303441
59	73115.53	107174.35	146582.20	9.8640096	10.0300909
58	73095.68	107111.87	146536.52	9.8638917	10.0298376
57	73075.83	107049.43	146490.89	9.8637737	10.0295843
56	73055.97	106987.02	146445.29	9.8636557	10.0293311
55	73036.10	106924.66	146399.73	9.8635376	10.0290779
54	73016.23	106862.33	146354.22	9.8634194	10.0288246
53	72996.35	106800.04	146308.75	9.8633011	10.0285714
52	72976.46	106737.79	146263.31	9.8631828	10.0283182
51	72956.57	106675.58	146217.92	9.8630644	10.0280650
50	72936.68	106613.41	146172.57	9.8629460	10.0278118
49	72916.77	106551.28	146127.26	9.8628274	10.0275587
48	72896.86	106489.18	146081.98	9.8627088	10.0273055
47	72876.95	106427.13	146036.75	9.8625902	10.0270523
46	72857.03	106365.11	145991.56	9.8624714	10.0267992
45	72837.10	106303.13	145946.41	9.8623526	10.0265461
44	72817.16	106241.19	145901.30	9.8622338	10.0262929
43	72797.22	106179.29	145856.23	9.8621148	10.0260398
42	72777.28	106117.42	145811.20	9.8619958	10.0257867
41	72757.32	106055.60	145766.21	9.8618767	10.0255336
40	72737.36	105993.81	145721.27	9.8617576	10.0252805
39	72717.40	105932.06	145676.36	9.8616383	10.0250274
38	72697.43	105870.35	145631.49	9.8615190	10.0247743
37	72677.45	105808.67	145586.66	9.8613997	10.0245213
36	72657.47	105747.04	145541.87	9.8612803	10.0242682
35	72637.48	105685.44	145497.12	9.8611608	10.0240151
34	72617.48	105623.88	145452.41	9.8610412	10.0237621
33	72597.48	105562.35	145407.74	9.8609215	10.0235091
32	72577.47	105500.87	145363.11	9.8608018	10.0232560
31	72557.46	105439.42	145318.52	9.8606821	10.0230030
30	72537.44	105378.01	145273.97	9.8605622	10.0227500

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43 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	68835.46	94896.46	137859.85	9.8378122	9.9772500
31	68856.55	94951.76	137897.92	9.8379453	9.9775030
32	68877.65	95007.09	137936.02	9.8380783	9.9777560
33	68898.73	95062.45	137974.16	9.8382112	9.9780090
34	68919.81	95117.84	138012.33	9.8383441	9.9782620
35	68940.89	95173.26	138050.53	9.8384769	9.9785149
36	68961.95	95228.71	138088.77	9.8386095	9.9787679
37	68983.02	95284.20	138127.04	9.8387422	9.9790209
38	69004.07	95339.71	138165.34	9.8388747	9.9792738
39	69025.12	95395.26	138203.67	9.8390072	9.9795268
40	69046.17	95450.83	138242.04	9.8391396	9.9797797
41	69067.21	95506.44	138280.44	9.8392719	9.9800326
42	69088.24	95562.08	138318.87	9.8394041	9.9802856
43	69109.27	95617.74	138357.34	9.8395363	9.9805385
44	69130.29	95673.44	138395.84	9.8396684	9.9807914
45	69151.31	95729.17	138434.37	9.8398004	9.9810443
46	69172.32	95784.94	138472.94	9.8399323	9.9812972
47	69193.32	95840.73	138511.53	9.8400642	9.9815501
48	69214.32	95896.55	138550.17	9.8401959	9.9818030
49	69235.31	95952.41	138588.83	9.8403276	9.9820559
50	69256.30	96008.29	138027.53	9.8404593	9.9823087
51	69277.28	96064.21	138666.26	9.8405908	9.9825616
52	69298.25	96120.16	138705.03	9.8407223	9.9828145
53	69319.22	96176.14	138743.83	9.8408537	9.9830673
54	69340.18	96232.15	138782.66	9.8409850	9.9833202
55	69361.14	96288.19	138821.53	9.8411162	9.9835730
56	69382.09	96344.27	138860.43	9.8412474	9.9838259
57	69403.04	96400.37	138899.36	9.8413785	9.9840787
58	69423.98	96456.51	138938.32	9.8415095	9.9843315
59	69444.91	96512.68	138977.33	9.8416404	9.9845844
60	69465.84	96568.88	139016.36	9.8417713	9.9848372

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46 Grad.

Minut.	Sinus.	Tang.	Secant.		Log. Sin.	Log. Tang.
30	72537.44	105378.01	145273.97		9.8605622	10.0227500
29	72517.41	105316.64	145229.46		9.8604423	10.0224970
28	72497.38	105255.31	145184.98		9.8603223	10.0222440
27	72477.34	105194.01	145140.55		9.8602022	10.0219910
26	72457.29	105132.75	145096.16		9.8600821	10.0217380
25	72437.24	105071.53	145051.81		9.8599619	10.0214851
24	72417.19	105010.34	145007.49		9.8598416	10.0212321
23	72397.12	104949.20	144963.22		9.8597213	10.0209791
22	72377.05	104888.09	144918.98		9.8596009	10.0207262
21	72356.98	104827.02	144874.78		9.8594804	10.0204732
20	72336.90	104765.98	144830.63		9.8593599	10.0202203
19	72316.81	104704.98	144786.51		9.8592393	10.0199674
18	72296.71	104644.02	144742.43		9.8591186	10.0197144
17	72276.61	104583.10	144698.39		9.8589978	10.0194615
16	72256.51	104522.21	144654.39		9.8588770	10.0192086
15	72236.40	104461.36	144610.43		9.8587561	10.0189557
14	72216.28	104400.55	144566.51		9.8586351	10.0187028
13	72196.15	104339.77	144522.62		9.8585141	10.0184499
12	72176.02	104279.04	144478.78		9.8583929	10.0181970
11	72155.89	104218.33	144434.97		9.8582718	10.0179441
10	72135.74	104157.67	144391.20		9.8581505	10.0176913
9	72115.59	104097.04	144347.48		9.8580292	10.0174384
8	72095.44	104036.45	144303.79		9.8579078	10.0171855
7	72075.28	103975.89	144260.13		9.8577863	10.0169327
6	72055.11	103915.38	144216.52		9.8576648	10.0166798
5	72034.94	103854.89	144172.95		9.8575432	10.0164270
4	72014.76	103794.45	144129.41		9.8574215	10.0161741
3	71994.57	103734.04	144085.92		9.8572998	10.0159213
2	71974.38	103673.67	144042.46		9.8571779	10.0156685
1	71954.18	103613.33	143999.04		9.8570561	10.0154156
0	71933.98	103553.03	143955.65		9.8569341	10.0151628

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44 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
0	69465.84	96568.88	139016.36	9.8417713	9.9848372
1	69486.76	96625.11	139055.43	9.8419021	9.9850900
2	69507.67	96681.37	139094.53	9.8420328	9.9853428
3	69528.58	96737.67	139133.66	9.8421634	9.9855956
4	69549.49	96793.99	139172.83	9.8422939	9.9858484
5	69570.39	96850.35	139212.03	9.8424244	9.9861012
6	69591.28	96906.74	139251.27	9.8425548	9.9863540
7	69612.17	96963.16	139290.54	9.8426851	9.9866068
8	69633.05	97019.62	139329.85	9.8428154	9.9868596
9	69653.92	97076.10	139369.18	9.8429456	9.9871123
10	69674.79	97132.62	139408.56	9.8430757	9.9873651
11	69695.65	97189.17	139447.96	9.8432057	9.9876179
12	69716.51	97245.75	139487.40	9.8433356	9.9878706
13	69737.36	97302.36	139526.88	9.8434655	9.9881234
14	69758.21	97359.01	139566.39	9.8435953	9.9883761
15	69779.05	97415.69	139605.93	9.8437250	9.9886289
16	69799.88	97472.40	139645.51	9.8438547	9.9888816
17	69820.71	97529.14	139685.12	9.8439842	9.9891344
18	69841.53	97585.91	139724.77	9.8441137	9.9893871
19	69892.34	97642.72	139764.45	9.8442432	9.9896399
20	69883.15	97699.56	139804.16	9.8443725	9.9898926
21	69903.96	97756.43	139843.91	9.8445018	9.9901453
22	69924.76	97813.33	139883.69	9.8446310	9.9903981
23	69945.55	97870.27	139923.51	9.8447601	9.9906508
24	69966.33	97927.24	139963.36	9.8448891	9.9909035
25	69987.11	97984.24	140003.25	9.8450181	9.9911562
26	70007.89	98041.27	140043.17	9.8451470	9.9914089
27	70028.66	98098.33	140083.13	9.8452758	9.9916616
28	70049.42	98155.43	140123.12	9.8454045	9.9919143
29	70070.18	98212.56	140163.15	9.8455332	9.9921670
30	70090.93	98269.73	140203.21	9.8456618	9.9924197

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45 Grad.

Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
60	71933.98	103553.03	143955.65	9.8569341	10.0151628
59	71913.77	103492.77	143912.31	9.8568121	10.0149100
58	71893.55	103432.54	143869.00	9.8566900	10.0146572
57	71873.33	103372.35	143825.74	9.8565678	10.0144044
56	71853.10	103312.20	143782.51	9.8564455	10.0141516
55	71832.87	103252.08	143739.32	9.8563232	10.0138988
54	71812.63	103191.99	143696.16	9.8562008	10.0136460
53	71792.38	103131.95	143653.05	9.8560784	10.0133932
52	71772.13	103071.94	143609.97	9.8559558	10.0131404
51	71751.87	103011.96	143566.93	9.8558332	10.0128877
50	71731.61	102952.03	143523.93	9.8557106	10.0126349
49	71711.34	102892.12	143480.97	9.8555878	10.0123821
48	71691.06	102832.26	143438.05	9.8554650	10.0121294
47	71670.78	102772.43	143395.16	9.8553421	10.0118766
46	71650.49	102712.63	143352.31	9.8552192	10.0116239
45	71630.19	102652.87	143309.50	9.8550961	10.0113711
44	71609.89	102593.15	143266.72	9.8549730	10.0111184
43	71589.59	102533.46	143223.99	9.8548499	10.0108656
42	71569.27	102473.81	143181.29	9.8547266	10.0106129
41	71548.95	102414.19	143138.63	9.8546033	10.0103601
40	71528.63	102354.61	143096.00	9.8544799	10.0101074
39	71508.30	102295.06	143053.42	9.8543564	10.0098547
38	71487.96	102235.55	143010.87	9.8542329	10.0096019
37	71467.62	102176.08	142968.36	9.8541093	10.0093492
36	71447.27	102116.64	142925.88	9.8539856	10.0090965
35	71426.91	102057.23	142883.45	9.8538619	10.0088438
34	71406.55	101997.86	142841.05	9.8537381	10.0085911
33	71386.18	101938.53	142798.68	9.8536142	10.0083384
32	71365.81	101879.23	142756.36	9.8534902	10.0080857
31	71345.43	101819.97	142714.07	9.8533662	10.0078330
30	71325.04	101760.74	142671.82	9.8532421	10.0075803

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44 Grad.

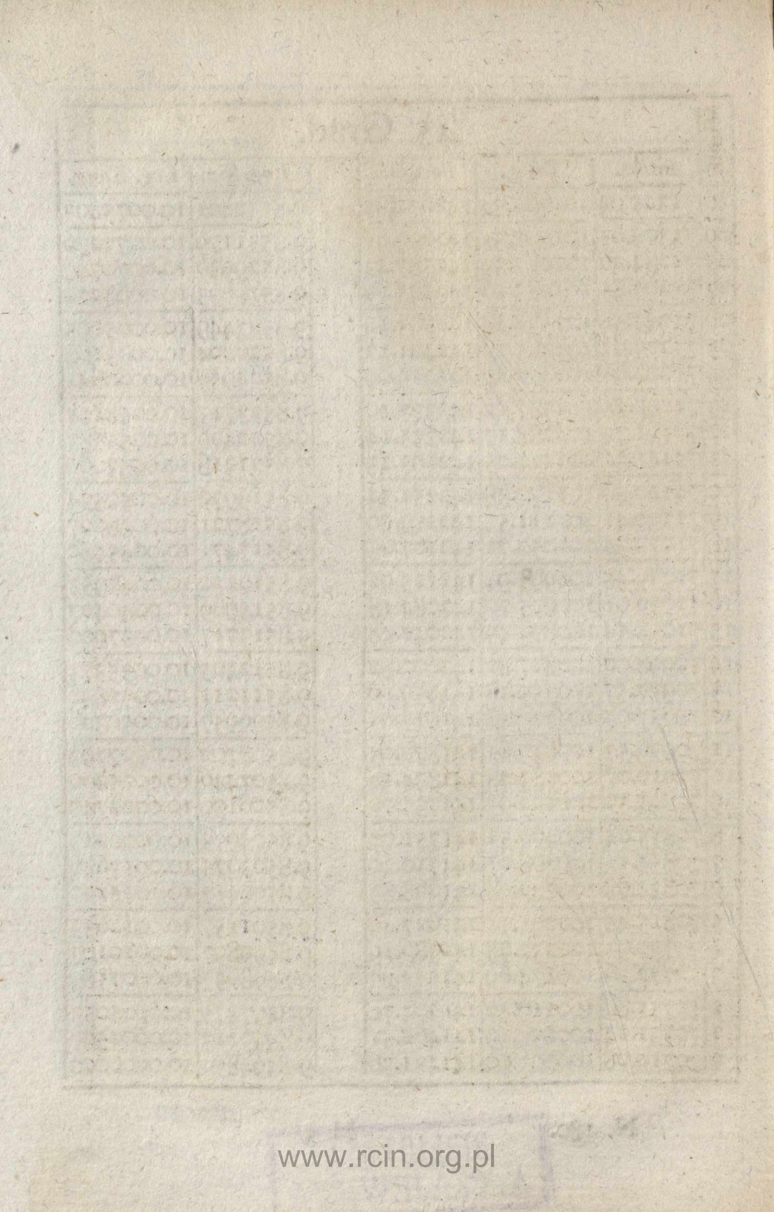
Minut.	Sinus.	Tang.	Secant.	Log. Sin.	Log. Tang.
30	70090.93	98269.73	140203.21	9.8456618	9.9924197
31	70111.67	98326.92	140243.30	9.8457903	9.9926724
32	70132.41	98384.15	140283.43	9.8459188	9.9929251
33	70153.14	98441.41	140323.60	9.8460471	9.9931778
34	70173.87	98498.71	140363.80	9.8461754	9.9934305
35	70194.59	98556.03	140404.03	9.8463036	9.9936832
36	70215.31	98613.39	140444.30	9.8464318	9.9939359
37	70236.01	98670.79	140484.61	9.8465599	9.9941886
38	70256.72	98728.21	140524.94	9.8466879	9.9944413
39	70277.41	98785.67	140565.32	9.8468158	9.9946940
40	70298.11	98843.16	140605.73	9.8469436	9.9949466
41	70318.79	98900.69	140646.17	9.8470714	9.9951993
42	70339.47	98958.25	140686.65	9.8471991	9.9954520
43	70360.14	99015.84	140727.17	9.8473267	9.9957047
44	70380.81	99073.46	140767.72	9.8474543	9.9959573
45	70401.47	99131.12	140808.31	9.8475817	9.9962100
46	70422.13	99188.81	140848.93	9.8477091	9.9964627
47	70442.78	99246.54	140889.58	9.8478365	9.9967154
48	70463.42	99304.29	140930.28	9.8479637	9.9969680
49	70484.06	99362.08	140971.00	9.8480909	9.9972207
50	70504.69	99419.91	141011.77	9.8482180	9.9974734
51	70525.32	99477.77	141052.57	9.8483450	9.9977260
52	70545.94	99535.66	141093.40	9.8484720	9.9979787
53	70566.55	99593.58	141134.27	9.8485989	9.9982314
54	70587.16	99651.54	141175.17	9.8487257	9.9984840
55	70607.76	99709.53	141216.12	9.8488524	9.9987367
56	70628.35	99767.56	141257.09	9.8489791	9.9989893
57	70648.94	99825.62	141298.10	9.8491057	9.9992420
58	70669.53	99883.71	141339.15	9.8492322	9.9994947
59	70690.11	99941.84	141380.24	9.8493586	9.9997473
60	70710.68	100000.00	141421.36	9.8494850	10.0000000

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45 Grad.

Minut.	Sinus.	Tang.	Secant.	*Log. Sin.*	*Log. Tang.*
30	71325.04	101760.74	142671.82	9.8532421	10.0075803
29	71304.65	101701.55	142629.61	9.8531179	10.0073276
28	71284.26	101642.39	142587.43	9.8529936	10.0070749
27	71263.85	101583.26	142545.29	9.8528693	10.0068222
26	71243.44	101524.18	142503.19	9.8527449	10.0065695
25	71223.03	101465.12	142461.12	9.8526204	10.0063168
24	71202.60	101406.10	142419.09	9.8524959	10.0060641
23	71182.18	101347.12	142377.10	9.8523713	10.0058114
22	71161.74	101288.17	142335.14	9.8522466	10.0055587
21	71141.30	101229.25	142293.23	9.8521218	10.0053060
20	71120.86	101170.38	142251.34	9.8519970	10.0050534
19	71100.41	101111.53	142209.50	9.8518721	10.0048007
18	71079.95	101052.72	142167.69	9.8517471	10.0045480
17	71059.48	100993.94	142125.92	9.8516220	10.0042953
16	71039.01	100935.20	142084.18	9.8514969	10.0040427
15	71018.54	100876.49	142042.48	9.8513717	10.0037900
14	70998.06	100817.82	142000.82	9.8512465	10.0035373
13	70977.57	100759.18	141959.20	9.8511211	10.0032846
12	70957.07	100700.58	141917.61	9.8509957	10.0030320
11	70936.57	100642.01	141876.05	9.8508702	10.0027793
10	70916.07	100583.48	141834.54	9.8507446	10.0025266
9	70895.56	100524.97	141793.06	9.8506190	10.0022740
8	70875.04	100466.51	141751.61	9.8504933	10.0020213
7	70854.51	100408.07	141710.20	9.8503675	10.0017686
6	70833.98	100349.68	141668.83	9.8502417	10.0015160
5	70813.45	100291.31	141627.49	9.8501157	10.0012633
4	70792.91	100232.98	141586.19	9.8499897	10.0010107
3	70772.36	100174.69	141544.93	9.8498637	10.0007580
2	70751.80	100116.42	141503.70	9.8497375	10.0005053
1	70731.24	100058.19	141462.51	9.8496113	10.0002527
0	70710.68	100000.00	141421.36	9.8494850	10.0000000

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TABVLA LOGARITHMORVM SINVVM ET TANGENTIVM

PRO

SINGVLIS MINVTIS SECVNDIS

PRIMI GRADVS.


BIBLIOTEKA
A. CZAJEWICZA

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Secund.	0 Minut. Log. Sin.	Log. Tang.	Secund.	0 Minut. Log. Sin.	Log. Tang.
1	4.6855749	4.6855749	31	6.1769366	6.1769366
2	4.9866049	4.9866049	32	6.1907248	6.1907248
3	5.1626961	5.1626961	33	6.2040888	6.2040888
4	5.2876349	5.2876349	34	6.2170538	6.2170538
5	5.3845449	5.3845449	35	6.2296429	6.2296429
6	5.4637261	5.4637261	36	6.2418774	6.2418774
7	5.5306729	5.5306729	37	6.2537766	6.2537766
8	5.5886649	5.5886649	38	6.2653585	6.2653585
9	5.6398174	5.6398174	39	6.2766395	6.2766395
10	5.6855749	5.6855749	40	6.2876349	6.2876349
11	5.7269676	5.7269676	41	6.2983587	6.2983587
12	5.7647561	5.7647561	42	6.3088242	6.3088242
13	5.7995182	5.7995182	43	6.3190433	6.3190433
14	5.8317029	5.8317029	44	6.3290275	6.3290275
15	5.8616661	5.8616661	45	6.3387874	6.3387874
16	5.8896948	5.8896948	46	6.3483327	6.3483327
17	5.9160238	5.9160238	47	6.3576727	6.3576727
18	5.9408474	5.9408474	48	6.3668161	6.3668161
19	5.9643285	5.9643285	49	6.3757709	6.3757709
20	5.9866049	5.9866049	50	6.3845449	6.3845449
21	6.0077942	6.0077942	51	6.3931450	6.3931450
22	6.0279975	6.0279975	52	6.4015782	6.4015782
23	6.0473027	6.0473027	53	6.4098507	6.4098507
24	6.0657861	6.0657861	54	6.4179686	6.4179686
25	6.0835149	6.0835149	55	6.4259376	6.4259376
26	6.1005482	6.1005482	56	6.4337629	6.4337629
27	6.1169386	6.1169386	57	6.4414497	6.4414497
28	6.1327329	6.1327329	58	6.4490029	6.4490029
29	6.1479729	6.1479729	59	6.4564269	6.4564269
30	6.1626961	6.1626961	60	6.4637261	6.4637261

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1. Minut.

Secund.	Log. Sin.	Log. Tang.
0	6.4637261	6.4637261
1	6.4709047	6.4709047
2	6.4779665	6.4779666
3	6.4849154	6.4849154
4	6.4917548	6.4917549
5	6.4984882	6.4984882
6	6.5051188	6.5051188
7	6.5116497	6.5116497
8	6.5180838	6.5180838
9	6.5244239	6.5244240
10	6.5306729	6.5306729
11	6.5368332	6.5368332
12	6.5429074	6.5429074
13	6.5488977	6.5488977
14	6.5548066	6.5548066
15	6.5606361	6.5606361
16	6.5663884	6.5663885
17	6.5720656	6.5720656
18	6.5776695	6.5776695
19	6.5832019	6.5832020
20	6.5886648	6.5886649
21	6.5940599	6.5940599
22	6.5993887	6.5993887
23	6.6046529	6.6046530
24	6.6098541	6.6098542
25	6.6149938	6.6149938
26	6.6200733	6.6200733
27	6.6250941	6.6250941
28	6.6300575	6.6300576
29	6.6349649	6.6349649

1. Minut.

Secund.	Log. Sin.	Log. Tang.
30	6.6398174	6.6398174
31	6.6446162	6.6446163
32	6.6493627	6.6493627
33	6.6540578	6.6540578
34	6.6587027	6.6587027
35	6.6632985	6.6632985
36	6.6678461	6.6678461
37	6.6723466	6.6723466
38	6.6768009	6.6768010
39	6.6812100	6.6812101
40	6.6855748	6.6855749
41	6.6898962	6.6898963
42	6.6941750	6.6941751
43	6.6984121	6.6984121
44	6.7026082	6.7026082
45	6.7067641	6.7067642
46	6.7108807	6.7108808
47	6.7149586	6.7149587
48	6.7189986	6.7189987
49	6.7230013	6.7230014
50	6.7269675	6.7269676
51	6.7308978	6.7308979
52	6.7347929	6.7347929
53	6.7386533	6.7386534
54	6.7424797	6.7424798
55	6.7462727	6.7462728
56	6.7500328	6.7500329
57	6.7537607	6.7537608
58	6.7574569	6.7574570
59	6.7611218	6.7611219

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2. Minut.

Secund.	Log. Sin.	Log. Tang.
0	6.7647561	6.7647562
1	6.7683602	6.7683603
2	6.7719347	6.7719347
3	6.7754800	6.7754800
4	6.7789965	6.7789966
5	6.7824849	6.7824849
6	6.7859454	6.7859455
7	6.7893786	6.7893786
8	6.7927848	6.7927849
9	6.7961645	6.7961646
10	6.7995182	6.7995183
11	6.8028461	6.8028462
12	6.8061488	6.8061489
13	6.8094265	6.8094266
14	6.8126796	6.8126797
15	6.8159086	6.8159087
16	6.8191137	6.8191138
17	6.8222954	6.8222955
18	6.8254539	6.8254540
19	6.8285896	6.8285897
20	6.8317029	6.8317030
21	6.8347939	6.8347940
22	6.8378632	6.8378633
23	6.8409109	6.8409110
24	6.8439373	6.8439374
25	6.8469428	6.8469429
26	6.8499277	6.8499278
27	6.8528922	6.8528923
28	6.8558365	6.8558367
29	6.8587611	6.8587612

2. Minut.

Secund.	Log. Sin.	Log. Tang.
30	6.8616661	6.8616662
31	6.8645518	6.8645519
32	6.8674184	6.8674185
33	6.8702663	6.8702664
34	6.8730955	6.8730957
35	6.8759065	6.8759066
36	6.8786994	6.8786995
37	6.8814745	6.8814746
38	6.8842319	6.8842320
39	6.8869719	6.8869721
40	6.8896948	6.8896949
41	6.8924007	6.8924008
42	6.8950898	6.8950900
43	6.8977624	6.8977626
44	6.9004187	6.9004188
45	6.9030588	6.9030589
46	6.9056829	6.9056830
47	6.9082913	6.9082914
48	6.9108841	6.9108842
49	6.9134615	6.9134617
50	6.9160237	6.9160239
51	6.9185709	6.9185711
52	6.9211033	6.9211034
53	6.9236209	6.9236211
54	6.9261241	6.9261242
55	6.9286129	6.9286130
56	6.9310875	6.9310876
57	6.9335481	6.9335482
58	6.9359948	6.9359950
59	6.9384278	6.9384280

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Secund.	3 Minut. Log. Sin.	3 Minut. Log. Tang.
0	6.9408473	6.9408475
1	6.9432534	6.9432536
2	6.9456462	6.9456464
3	6.9480259	6.9480261
4	6.9503926	6.9503928
5	6.9527465	6.9527467
6	6.9550878	6.9550879
7	6.9574164	6.9574166
8	6.9597327	6.9597328
9	6.9620366	6.9620368
10	6.9643284	6.9643286
11	6.9666082	6.9666084
12	6.9688760	6.9688762
13	6.9711321	6.9711323
14	6.9733765	6.9733767
15	6.9756094	6.9756096
16	6.9778309	6.9778311
17	6.9800410	6.9800412
18	6.9822400	6.9822402
19	6.9844279	6.9844281
20	6.9866048	6.9866050
21	6.9887709	6.9887711
22	6.9909262	6.9909264
23	6.9930708	6.9930710
24	6.9952050	6.9952052
25	6.9973287	6.9973289
26	6.9994420	6.9994422
27	7.0015451	7.0015454
28	7.0036381	7.0036383
29	7.0057211	7.0057213
30	7.0077941	7.0077943
31	7.0098572	7.0098575
32	7.0119107	7.0119109
33	7.0139544	7.0139546
34	7.0159886	7.0159888
35	7.0180132	7.0180135
36	7.0200285	7.0200288
37	7.0220345	7.0220348
38	7.0240313	7.0240315
39	7.0260189	7.0260191
40	7.0279975	7.0279977
41	7.0299671	7.0299673
42	7.0319278	7.0319280
43	7.0338796	7.0338799
44	7.0358228	7.0358231
45	7.0377573	7.0377576
46	7.0396832	7.0396835
47	7.0416006	7.0416009
48	7.0435096	7.0435099
49	7.0454103	7.0454105
50	7.0473026	7.0473029
51	7.0491868	7.0491870
52	7.0510628	7.0510630
53	7.0529307	7.0529310
54	7.0547906	7.0547909
55	7.0566426	7.0566429
56	7.0584868	7.0584871
57	7.0603231	7.0603234
58	7.0621517	7.0621520
59	7.0639727	7.0639730

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Secund.	4. Minut. Log. Sin.	Log. Tang.	Secund.	4. Minut. Log. Sin.	Log. Tang.
0	7.0657860	7.0657863	30	7.1169385	7.1169389
1	7.0675918	7.0675921	31	7.1185440	7.1185444
2	7.0693901	7.0693904	32	7.1201436	7.1201440
3	7.0711810	7.0711813	33	7.1217374	7.1217378
4	7.0729646	7.0729649	34	7.1233253	7.1233257
5	7.0747408	7.0747412	35	7.1249074	7.1249078
6	7.0765099	7.0765102	36	7.1264838	7.1264842
7	7.0782717	7.0782720	37	7.1280545	7.1280549
8	7.0800264	7.0800268	38	7.1296195	7.1296199
9	7.0817741	7.0817744	39	7.1311789	7.1311793
10	7.0835148	7.0835151	40	7.1327328	7.1327332
11	7.0852485	7.0852488	41	7.1342811	7.1342815
12	7.0869753	7.0869756	42	7.1358238	7.1358242
13	7.0886953	7.0886956	43	7.1373612	7.1373616
14	7.0904085	7.0904088	44	7.1388931	7.1388935
15	7.0921149	7.0921153	45	7.1404196	7.1404200
16	7.0938147	7.0938151	46	7.1419408	7.1419412
17	7.0955079	7.0955082	47	7.1434566	7.1434570
18	7.0971945	7.0971948	48	7.1449672	7.1449676
19	7.0988745	7.0988749	49	7.1464726	7.1464730
20	7.1005481	7.1005484	50	7.1479727	7.1479732
21	7.1022153	7.1022156	51	7.1494677	7.1494681
22	7.1038760	7.1038764	52	7.1509576	7.1509580
23	7.1055305	7.1055309	53	7.1524423	7.1524428
24	7.1071787	7.1071790	54	7.1539221	7.1539225
25	7.1088206	7.1088210	55	7.1553967	7.1553972
26	7.1104564	7.1104567	56	7.1568664	7.1568669
27	7.1120860	7.1120864	57	7.1583312	7.1583316
28	7.1137095	7.1137099	58	7.1597910	7.1597914
29	7.1153270	7.1153274	59	7.1612459	7.1612464

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5 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.1626960	7.1626964
1	7.1641412	7.1641417
2	7.1655817	7.1655821
3	7.1670173	7.1670178
4	7.1684483	7.1684488
5	7.1698745	7.1698750
6	7.1712961	7.1712966
7	7.1727131	7.1727136
8	7.1741254	7.1741259
9	7.1755332	7.1755337
10	7.1769364	7.1769369
11	7.1783351	7.1783356
12	7.1797293	7.1797298
13	7.1811190	7.1811195
14	7.1825043	7.1825049
15	7.1838853	7.1838858
16	7.1852618	7.1852623
17	7.1866340	7.1866345
18	7.1880018	7.1890023
19	7.1893654	7.1893659
20	7.1907247	7.1907252
21	7.1920797	7.1920802
22	7.1934306	7.1934311
23	7.1947772	7.1947777
24	7.1961197	7.1961202
25	7.1974580	7.1974586
26	7.1987923	7.1987928
27	7.2001224	7.2001230
28	7.2014485	7.2014491
29	7.2027706	7.2027711

5 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.2040886	7.2040892
31	7.2054027	7.2054032
32	7.2067128	7.2067133
33	7.2080189	7.2080195
34	7.2093211	7.2093217
35	7.2106195	7.2106201
36	7.2119140	7.2119145
37	7.2132046	7.2132052
38	7.2144914	7.2144920
39	7.2157744	7.2157750
40	7.2170536	7.2170542
41	7.2183290	7.2183296
42	7.2196008	7.2196014
43	7.2208688	7.2208694
44	7.2221331	7.2221337
45	7.2233938	7.2233944
46	7.2246508	7.2246514
47	7.2259041	7.2259048
48	7.2271539	7.2271545
49	7.2284001	7.2284007
50	7.2296427	7.2296433
51	7.2308818	7.2308824
52	7.2321173	7.2321180
53	7.2333494	7.2333500
54	7.2345779	7.2345786
55	7.2358030	7.2358036
56	7.2370246	7.2370253
57	7.2382429	7.2382435
58	7.2394577	7.2394583
59	7.2406691	7.2406698

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6 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.2418771	7.2418778
1	7.2430818	7.2430825
2	7.2442832	7.2442839
3	7.2454813	7.2454819
4	7.2466760	7.2466767
5	7.2478675	7.2478682
6	7.2490557	7.2490564
7	7.2502407	7.2502414
8	7.2514225	7.2514231
9	7.2526010	7.2526017
10	7.2537764	7.2537771
11	7.2549485	7.2549492
12	7.2561176	7.2561183
13	7.2572835	7.2572842
14	7.2584462	7.2584469
15	7.2596059	7.2596066
16	7.2607625	7.2607632
17	7.2619160	7.2619167
18	7.2630664	7.2630672
19	7.2642138	7.2642146
20	7.2653582	7.2653590
21	7.2664996	7.2665003
22	7.2676380	7.2676387
23	7.2687734	7.2687741
24	7.2699058	7.2699066
25	7.2710353	7.2710361
26	7.2721619	7.2721627
27	7.2732856	7.2732863
28	7.2744063	7.2744071
29	7.2755242	7.2755250

6 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.2766392	7.2766400
31	7.2777514	7.2777521
32	7.2788607	7.2788615
33	7.2799672	7.2799679
34	7.2810708	7.2810716
35	7.2821717	7.2821725
36	7.2832698	7.2832706
37	7.2843651	7.2843659
38	7.2854577	7.2854585
39	7.2865475	7.2865483
40	7.2876346	7.2876354
41	7.2887190	7.2887198
42	7.2898006	7.2898015
43	7.2908796	7.2908805
44	7.2919560	7.2919568
45	7.2930296	7.2930304
46	7.2941006	7.2941015
47	7.2951690	7.2951698
48	7.2962347	7.2962356
49	7.2972979	7.2972987
50	7.2983584	7.2983593
51	7.2994164	7.2994173
52	7.3004718	7.3004727
53	7.3015246	7.3015255
54	7.3025749	7.3025758
55	7.3036227	7.3036235
56	7.3046679	7.3046688
57	7.3057106	7.3057115
58	7.3067509	7.3067517
59	7.3077886	7.3077895

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7 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.3088239	7.3088248
1	7.3098567	7.3098576
2	7.3108870	7.3108879
3	7.3119149	7.3119158
4	7.3129404	7.3129413
5	7.3139635	7.3139644
6	7.3149842	7.3149851
7	7.3160024	7.3160034
8	7.3170183	7.3170193
9	7.3180318	7.3180328
10	7.3190430	7.3190440
11	7.3200518	7.3200528
12	7.3210583	7.3210592
13	7.3220624	7.3220634
14	7.3230643	7.3230652
15	7.3240638	7.3240648
16	7.3250610	7.3250620
17	7.3260560	7.3260570
18	7.3270487	7.3270496
19	7.3280391	7.3280400
20	7.3290272	7.3290282
21	7.3300131	7.3300141
22	7.3309968	7.3309978
23	7.3319783	7.3319793
24	7.3329575	7.3329585
25	7.3339345	7.3339356
26	7.3349094	7.3349104
27	7.3358821	7.3358831
28	7.3368525	7.3368536
29	7.3378209	7.3378219
30	7.3387870	7.3387881
31	7.3397511	7.3397521
32	7.3407130	7.3407140
33	7.3416727	7.3416738
34	7.3426304	7.3426314
35	7.3435859	7.3435870
36	7.3445394	7.3445404
37	7.3454907	7.3454918
38	7.3464400	7.3464411
39	7.3473872	7.3473883
40	7.3483323	7.3483334
41	7.3492754	7.3492765
42	7.3502165	7.3502176
43	7.3511555	7.3511566
44	7.3520925	7.3520936
45	7.3530275	7.3530286
46	7.3539604	7.3539615
47	7.3548914	7.3548925
48	7.3558203	7.3558215
49	7.3567473	7.3567485
50	7.3576723	7.3576735
51	7.3585954	7.3585965
52	7.3595165	7.3595176
53	7.3604356	7.3604368
54	7.3613528	7.3613540
54	7.3622681	7.3622692
56	7.3631814	7.3631826
57	7.3640929	7.3640940
58	7.3650024	7.3650035
59	7.3659100	7.3659112

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8 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.3668157	7.3668169
1	7.3677195	7.3677207
2	7.3686215	7.3686227
3	7.3695216	7.3695228
4	7.3704198	7.3704210
5	7.3713162	7.3713174
6	7.3722107	7.3722119
7	7.3731034	7.3731046
8	7.3739943	7.3739955
9	7.3748832	7.3748845
10	7.3757705	7.3757718
11	7.3766559	7.3766572
12	7.3775396	7.3775408
13	7.3784214	7.3784226
14	7.3793014	7.3793026
15	7.3801796	7.3801809
16	7.3810561	7.3810574
17	7.3819308	7.3819321
18	7.3828038	7.3828051
19	7.3836750	7.3836763
20	7.3845444	7.3845457
21	7.3854122	7.3854134
22	7.3862782	7.3862794
23	7.3871424	7.3871437
24	7.3880050	7.3880063
25	7.3888658	7.3888671
26	7.3897249	7.3897263
27	7.3905824	7.3905837
28	7.3914381	7.3914395
29	7.3922922	7.3922935
30	7.3931446	7.3931459
31	7.3939953	7.3939967
32	7.3948444	7.3948457
33	7.3956918	7.3956931
34	7.3965375	7.3965389
35	7.3973816	7.3973830
36	7.3982241	7.3982255
37	7.3990650	7.3990663
38	7.3999042	7.3999055
39	7.4007418	7.4007431
40	7.4015778	7.4015791
41	7.4024121	7.4024135
42	7.4032449	7.4032463
43	7.4040761	7.4040775
44	7.4049057	7.4049071
45	7.4057337	7.4057351
46	7.4065601	7.4065616
47	7.4073850	7.4073864
48	7.4082083	7.4082097
49	7.4090301	7.4090315
50	7.4098503	7.4098517
51	7.4106689	7.4106703
52	7.4114860	7.4114875
53	7.4123016	7.4123030
54	7.4131156	7.4131171
55	7.4139282	7.4139296
56	7.4147392	7.4147406
57	7.4155487	7.4155501
58	7.4163567	7.4163581
59	7.4171631	7.4171646

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9 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.4179681	7.4179696
1	7.4187716	7.4187731
2	7.4195737	7.4195752
3	7.4203742	7.4203757
4	7.4211733	7.4211748
5	7.4219709	7.4219724
6	7.4227670	7.4227685
7	7.4235617	7.4235632
8	7.4243549	7.4243564
9	7.4251467	7.4251482
10	7.4259370	7.4259386
11	7.4267259	7.4267275
12	7.4275134	7.4275150
13	7.4282995	7.4283010
14	7.4290841	7.4290857
15	7.4298673	7.4298689
16	7.4306491	7.4306507
17	7.4314295	7.4314311
18	7.4322085	7.4322101
19	7.4329861	7.4329877
20	7.4337624	7.4337640
21	7.4345372	7.4345388
22	7.4353106	7.4353123
23	7.4360827	7.4360843
24	7.4368534	7.4368551
25	7.4376228	7.4376244
26	7.4383908	7.4383924
27	7.4391574	7.4391590
28	7.4399227	7.4399243
29	7.4406866	7.4406882

9. Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.4414492	7.4414508
31	7.4422104	7.4422121
32	7.4429703	7.4429720
33	7.4437289	7.4437306
34	7.4444862	7.4444879
35	7.4452421	7.4452438
36	7.4459968	7.4459985
37	7.4467501	7.4467518
38	7.4475021	7.4475038
39	7.4482529	7.4482546
40	7.4490023	7.4490040
41	7.4497504	7.4497521
42	7.4504973	7.4504990
43	7.4512428	7.4512446
44	7.4519871	7.4519889
45	7.4527302	7.4527319
46	7.4534719	7.4534737
47	7.4542124	7.4542141
48	7.4549516	7.4549534
49	7.4556896	7.4556913
50	7.4564263	7.4564281
51	7.4571618	7.4571635
52	7.4578960	7.4578978
53	7.4586290	7.4586308
54	7.4593607	7.4593625
55	7.4600912	7.4600930
56	7.4608205	7.4608223
57	7.4615486	7.4615504
58	7.4622754	7.4622773
59	7.4630011	7.4630030

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10 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.4637255	7.4637273
1	7.4644487	7.4644506
2	7.4651707	7.4651726
3	7.4658916	7.4658934
4	7.4666112	7.4666130
5	7.4673296	7.4673315
6	7.4680469	7.4680487
7	7.4687629	7.4687648
8	7.4694778	7.4694797
9	7.4701915	7.4701934
10	7.4709041	7.4709060
11	7.4716154	7.4716173
12	7.4723257	7.4723276
13	7.4730347	7.4730366
14	7.4737426	7.4737445
15	7.4744493	7.4744513
16	7.4751549	7.4751569
17	7.4758594	7.4758613
18	7.4765627	7.4765646
19	7.4772649	7.4772668
20	7.4779659	7.4779679
21	7.4786658	7.4786678
22	7.4793646	7.4793666
23	7.4800623	7.4800642
24	7.4807588	7.4807608
25	7.4814542	7.4814562
26	7.4821485	7.4821505
27	7.4828417	7.4828437
28	7.4835338	7.4835359
29	7.4842248	7.4842269

10 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.4849147	7.4849168
31	7.4856035	7.4856056
32	7.4862913	7.4862933
33	7.4869779	7.4869799
34	7.4876634	7.4876655
35	7.4883479	7.4883500
36	7.4890313	7.4890334
37	7.4897136	7.4897157
38	7.4903949	7.4903969
39	7.4910750	7.4910771
40	7.4917541	7.4917562
41	7.4924322	7.4924343
42	7.4931092	7.4931113
43	7.4937851	7.4937872
44	7.4944600	7.4944621
45	7.4951339	7.4951360
46	7.4958067	7.4958088
47	7.4964784	7.4964806
48	7.4971492	7.4971513
49	7.4978188	7.4978210
50	7.4984875	7.4984897
51	7.4991551	7.4991573
52	7.4998217	7.4998239
53	7.5004873	7.5004895
54	7.5011519	7.5011541
55	7.5018154	7.5018176
56	7.5024780	7.5024802
57	7.5031395	7.5031417
58	7.5038000	7.5038022
59	7.5044595	7.5044618

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II Miutn.

Secund.	Log. Sin.	Log. Tang.
0	7.5051181	7.5051203
1	7.5057756	7.5057778
2	7.5064321	7.5064343
3	7.5070876	7.5070899
4	7.5077422	7.5077444
5	7.5083958	7.5083980
6	7.5090483	7.5090506
7	7.5096999	7.5097022
8	7.5103506	7.5103528
9	7.5110002	7.5110025
10	7.5116489	7.5116512
11	7.5122966	7.5122989
12	7.5129434	7.5129457
13	7.5135892	7.5135915
14	7.5142340	7.5142363
15	7.5148779	7.5148802
16	7.5155208	7.5155231
17	7.5161628	7.5161651
18	7.5168038	7.5168061
19	7.5174439	7.5174462
20	7.5180830	7.5180854
21	7.5187212	7.5187236
22	7.5193585	7.5193608
23	7.5199948	7.5199972
24	7.5206302	7.5206326
25	7.5212646	7.5212670
26	7.5218982	7.5219006
27	7.5225308	7.5225332
28	7.5231625	7.5231649
29	7.5237933	7.5237957

II Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.5244231	7.5244256
31	7.5250521	7.5250545
32	7.5256801	7.5256826
33	7.5263073	7.5263097
34	7.5269335	7.5269360
35	7.5275588	7.5275613
36	7.5281833	7.5281858
37	7.5288068	7.5288093
38	7.5294295	7.5294319
39	7.5300512	7.5300537
40	7.5306721	7.5306746
41	7.5312920	7.5312946
42	7.5319111	7.5319137
43	7.5325294	7.5325319
44	7.5331467	7.5331492
45	7.5337631	7.5337657
46	7.5343787	7.5343813
47	7.5349934	7.5349960
48	7.5356073	7.5356098
49	7.5362202	7.5362228
50	7.5368324	7.5368349
51	7.5374436	7.5374462
52	7.5380540	7.5380566
53	7.5386635	7.5386661
54	7.5392722	7.5392748
55	7.5398800	7.5398826
56	7.5404870	7.5404896
57	7.5410931	7.5410958
58	7.5416984	7.5417011
59	7.5423029	7.5423055

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12. Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.5429065	7.5429091
1	7.5435092	7.5435119
2	7.5441112	7.5441138
3	7.5447123	7.5447149
4	7.5453125	7.5453152
5	7.5459120	7.5459147
6	7.5465106	7.5465133
7	7.5471084	7.5471111
8	7.5477053	7.5477080
9	7.5483015	7.5483042
10	7.5488968	7.5488995
11	7.5494913	7.5494941
12	7.5500850	7.5500878
13	7.5506779	7.5506807
14	7.5512700	7.5512728
15	7.5518613	7.5518640
16	7.5524518	7.5524545
17	7.5530414	7.5530442
18	7.5536303	7.5536331
19	7.5542184	7.5542212
20	7.5548057	7.5548084
21	7.5553921	7.5553949
22	7.5559778	7.5559806
23	7.5565627	7.5565656
24	7.5571469	7.5571497
25	7.5577302	7.5577330
26	7.5583127	7.5583156
27	7.5588945	7.5588974
28	7.5594755	7.5594784
29	7.5600557	7.5600586

12. Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.5606352	7.5606380
31	7.5612138	7.5612167
32	7.5617917	7.5617946
33	7.5623689	7.5623718
34	7.5629452	7.5629481
35	7.5635208	7.5635238
36	7.5640957	7.5640986
37	7.5646698	7.5646727
38	7.5652431	7.5652460
39	7.5658157	7.5658186
40	7.5663875	7.5663904
41	7.5669585	7.5669615
42	7.5675289	7.5675318
43	7.5680984	7.5681014
44	7.5686672	7.5686702
45	7.5692353	7.5692383
46	7.5698026	7.5698056
47	7.5703692	7.5703722
48	7.5709351	7.5709381
49	7.5715002	7.5715032
50	7.5720646	7.5720676
51	7.5726282	7.5726313
52	7.5731912	7.5731942
53	7.5737533	7.5737564
54	7.5743148	7.5743179
55	7.5748755	7.5748786
56	7.5754356	7.5754386
57	7.5759949	7.5759979
58	7.5765534	7.5765565
59	7.5771113	7.5771144

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13. Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.5776684	7.5776715
1	7.5782249	7.5782280
2	7.5787806	7.5787837
3	7.5793356	7.5793387
4	7.5798899	7.5798930
5	7.5804435	7.5804466
6	7.5809964	7.5809995
7	7.5815485	7.5815517
8	7.5821000	7.5821032
9	7.5826508	7.5826540
10	7.5832009	7.5832041
11	7.5837503	7.5837535
12	7.5842990	7.5843022
13	7.5848470	7.5848502
14	7.5853943	7.5853975
15	7.5859409	7.5859441
16	7.5864869	7.5864901
17	7.5870321	7.5870353
18	7.5875767	7.5875799
19	7.5881206	7.5881238
20	7.5886638	7.5886670
21	7.5892063	7.5892096
22	7.5897481	7.5897514
23	7.5902893	7.5902926
24	7.5908298	7.5908331
25	7.5913696	7.5913730
26	7.5919088	7.5919121
27	7.5924473	7.5924506
28	7.5929851	7.5929884
29	7.5935223	7.5935256
30	7.5940588	7.5940621
31	7.5945946	7.5945980
32	7.5951298	7.5951331
33	7.5956643	7.5956677
34	7.5961981	7.5962015
35	7.5967313	7.5967347
36	7.5972639	7.5972673
37	7.5977958	7.5977992
38	7.5983270	7.5983304
39	7.5988576	7.5988611
40	7.5993876	7.5993910
41	7.5999169	7.5999203
42	7.6004455	7.6004490
43	7.6009735	7.6009770
44	7.6015009	7.6015044
45	7.6020277	7.6020311
46	7.6025538	7.6025572
47	7.6030792	7.6030827
48	7.6036040	7.6036075
49	7.6041282	7.6041317
50	7.6046518	7.6046553
51	7.6051747	7.6051782
52	7.6056970	7.6057005
53	7.6062187	7.6062222
54	7.6067397	7.6067433
55	7.6072602	7.6072637
56	7.6077800	7.6077835
57	7.6082991	7.6083027
58	7.6088177	7.6088213
59	7.6093356	7.6093392

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14 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.6098530	7.6098566
1	7.6103697	7.6103733
2	7.6108858	7.6108894
3	7.6114012	7.6114049
4	7.6119161	7.6119197
5	7.6124304	7.6124340
6	7.6129440	7.6129477
7	7.6134571	7.6134607
8	7.6139695	7.6139732
9	7.6144813	7.6144850
10	7.6149926	7.6149963
11	7.6155032	7.6155069
12	7.6160132	7.6160169
13	7.6165227	7.6165264
14	7.6170315	7.6170352
15	7.6175397	7.6175435
16	7.6180474	7.6180511
17	7.6185544	7.6185582
18	7.6190609	7.6190647
19	7.6195668	7.6195705
20	7.6200721	7.6200758
21	7.6205768	7.6205805
22	7.6210809	7.6210847
23	7.6215844	7.6215880
24	7.6220873	7.6220911
25	7.6225897	7.6225935
26	7.6230915	7.6230953
27	7.6235927	7.6235965
28	7.6240933	7.6240972
29	7.6245934	7.6245972

14 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.6250928	7.6250967
31	7.6255917	7.6255956
32	7.6260901	7.6260939
33	7.6265878	7.6265917
34	7.6270850	7.6270889
35	7.6275816	7.6275855
36	7.6280777	7.6280816
37	7.6285732	7.6285771
38	7.6290681	7.6290720
39	7.6295624	7.6295664
40	7.6300562	7.6300602
41	7.6305495	7.6305534
42	7.6310421	7.6310461
43	7.6315342	7.6315382
44	7.6320258	7.6320298
45	7.6325168	7.6325208
46	7.6330073	7.6330113
47	7.6334971	7.6335012
48	7.6339865	7.6339905
49	7.6344753	7.6344793
50	7.6349635	7.6349676
51	7.6354512	7.6354553
52	7.6359384	7.6359424
53	7.6364250	7.6364290
54	7.6369110	7.6369151
55	7.6373965	7.6374006
56	7.6378815	7.6378856
57	7.6383659	7.6383700
58	7.6388498	7.6388539
59	7.6393332	7.6393373

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15 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.6398160	7.6398201
1	7.6402983	7.6403024
2	7.6407800	7.6407842
3	7.6412612	7.6412654
4	7.6417419	7.6417461
5	7.6422221	7.6422262
6	7.6427017	7.6427059
7	7.6431808	7.6431850
8	7.6436593	7.6436635
9	7.6441373	7.6441416
10	7.6446149	7.6446191
11	7.6450918	7.6450961
12	7.6455683	7.6455725
13	7.6460442	7.6460485
14	7.6465196	7.6465239
15	7.6469945	7.6469988
16	7.6474689	7.6474732
17	7.6479428	7.6479471
18	7.6484161	7.6484204
19	7.6488889	7.6488933
20	7.6493613	7.6493656
21	7.6498331	7.6498374
22	7.6503043	7.6503087
23	7.6507751	7.6507795
24	7.6512454	7.6512497
25	7.6517151	7.6517195
26	7.6521844	7.6521888
27	7.6526531	7.6526575
28	7.6531214	7.6531258
29	7.6535891	7.6535935

15 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.6540563	7.6540608
31	7.6545231	7.6545275
32	7.6549893	7.6549937
33	7.6554550	7.6554595
34	7.6559203	7.6559247
35	7.6563850	7.6563895
36	7.6568492	7.6568537
37	7.6573130	7.6573174
38	7.6577762	7.6577807
39	7.6582390	7.6582435
40	7.6587012	7.6587057
41	7.6591630	7.6591675
42	7.6596243	7.6596288
43	7.6600850	7.6600896
44	7.6605453	7.6605499
45	7.6610052	7.6610097
46	7.6614645	7.6614690
47	7.6619233	7.6619279
48	7.6623817	7.6623863
49	7.6628395	7.6628441
50	7.6632969	7.6633015
51	7.6637538	7.6637585
52	7.6642103	7.6642149
53	7.6646662	7.6646709
54	7.6651217	7.6651263
54	7.6655767	7.6655813
56	7.6660312	7.6660359
57	7.6664852	7.6664899
58	7.6669388	7.6669435
59	7.6673919	7.6673966

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16 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.6678445	7.6678492
1	7.6682967	7.6683014
2	7.6687484	7.6687531
3	7.6691996	7.6692043
4	7.6696503	7.6696551
5	7.6701006	7.6701053
6	7.6705504	7.6705552
7	7.6709998	7.6710045
8	7.6714486	7.6714534
9	7.6718970	7.6719018
10	7.6723450	7.6723498
11	7.6727925	7.6727973
12	7.6732395	7.6732443
13	7.6736861	7.6736909
14	7.6741322	7.6741371
15	7.6745779	7.6745827
16	7.6750231	7.6750279
17	7.6754678	7.6754727
18	7.6759121	7.6759170
19	7.6763559	7.6763608
20	7.6767993	7.6768042
21	7.6772422	7.6772471
22	7.6776847	7.6776896
23	7.6781267	7.6781317
24	7.6785683	7.6785733
25	7.6790094	7.6790144
26	7.6794501	7.6794551
27	7.6798904	7.6798953
28	7.6803302	7.6803351
29	7.6807695	7.6807745

16 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.6812084	7.6812134
31	7.6816469	7.6816519
32	7.6820849	7.6820899
33	7.6825224	7.6825275
34	7.6829596	7.6829646
35	7.6833963	7.6834013
36	7.6838325	7.6838376
37	7.6842683	7.6842734
38	7.6847037	7.6847088
39	7.6851387	7.6851438
40	7.6855732	7.6855783
41	7.6860072	7.6860124
42	7.6864409	7.6864460
43	7.6868741	7.6868792
44	7.6873069	7.6873120
45	7.6877392	7.6877444
46	7.6881711	7.6881763
47	7.6886026	7.6886078
48	7.6890337	7.6890389
49	7.6894643	7.6894695
50	7.6898945	7.6898997
51	7.6903243	7.6903295
52	7.6907536	7.6907589
53	7.6911826	7.6911878
54	7.6916111	7.6916163
55	7.6920392	7.6920444
56	7.6924668	7.6924721
57	7.6928941	7.6928993
58	7.6933209	7.6933262
59	7.6937473	7.6937526

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17 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.6941733	7.6941786
1	7.6945988	7.6946042
2	7.6950240	7.6950293
3	7.6954487	7.6954541
4	7.6958730	7.6958784
5	7.6962969	7.6963023
6	7.6967204	7.6967258
7	7.6971435	7.6971489
8	7.6975662	7.6975716
9	7.6979884	7.6979938
10	7.6984103	7.6984157
11	7.6988317	7.6988371
12	7.6992528	7.6992582
13	7.6996734	7.6996788
14	7.7000936	7.7000990
15	7.7005134	7.7005189
16	7.7009328	7.7009383
17	7.7013518	7.7013573
18	7.7017704	7.7017759
19	7.7021886	7.7021941
20	7.7026064	7.7026119
21	7.7030238	7.7030293
22	7.7034407	7.7034463
23	7.7038573	7.7038629
24	7.7042735	7.7042791
25	7.7046893	7.7046949
26	7.7051047	7.7051103
27	7.7055197	7.7055253
28	7.7059343	7.7059399
29	7.7063485	7.7063541
30	7.7067623	7.7067679
31	7.7071757	7.7071813
32	7.7075887	7.7075944
33	7.7080014	7.7080070
34	7.7084136	7.7084193
35	7.7088254	7.7088311
36	7.7092369	7.7092426
37	7.7096480	7.7096537
38	7.7100586	7.7100643
39	7.7104689	7.7104746
40	7.7108788	7.7108846
41	7.7112883	7.7112941
42	7.7116975	7.7117032
43	7.7121062	7.7121120
44	7.7125146	7.7125203
45	7.7129225	7.7129283
46	7.7133301	7.7133359
47	7.7137373	7.7137432
48	7.7141442	7.7141500
49	7.7145506	7.7145565
50	7.7149567	7.7149625
51	7.7153624	7.7153682
52	7.7157677	7.7157736
53	7.7161726	7.7161785
54	7.7165772	7.7165831
55	7.7169814	7.7169873
56	7.7173852	7.7173911
57	7.7177886	7.7177945
58	7.7181917	7.7181976
59	7.7185943	7.7186003

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Secund.	18 Minut. Log. Sin.	18 Minut. Log. Tang.	Secund.	18 Minut. Log. Sin.	18 Minut. Log. Tang.
0	7·7189966	7·7190026	30	7·7308957	7·7309020
1	7·7193986	7·7194045	31	7·7312868	7·7312931
2	7·7198001	7·7198061	32	7·7316776	7·7316839
3	7·7202013	7·7202073	33	7·7320679	7·7320742
4	7·7206021	7·7206081	34	7·7324579	7·7324643
5	7·7210026	7·7210086	35	7·7328476	7·7328540
6	7·7214027	7·7214087	36	7·7332369	7·7332433
7	7·7218024	7·7218084	37	7·7336259	7·7336323
8	7·7222017	7·7222078	38	7·7340145	7·7340209
9	7·7226007	7·7226068	39	7·7344028	7·7344092
10	7·7229993	7·7230054	40	7·7347908	7·7347972
11	7·7233976	7·7234037	41	7·7351783	7·7351848
12	7·7237955	7·7238016	42	7·7355656	7·7355720
13	7·7241930	7·7241991	43	7·7359525	7·7359589
14	7·7245902	7·7245963	44	7·7363390	7·7363455
15	7·7249869	7·7249931	45	7·7367252	7·7367317
16	7·7253834	7·7253895	46	7·7371111	7·7371176
17	7·7257794	7·7257856	47	7·7374966	7·7375031
18	7·7261752	7·7261813	48	7·7378818	7·7378883
19	7·7265705	7·7265767	49	7·7382666	7·7382731
20	7·7269655	7·7269717	50	7·7386511	7·7386577
21	7·7273601	7·7273663	51	7·7390353	7·7390418
22	7·7277544	7·7277606	52	7·7394191	7·7394257
23	7·7281483	7·7281545	53	7·7398026	7·7398091
24	7·7285419	7·7285481	54	7·7401857	7·7401923
25	7·7289351	7·7289413	55	7·7405685	7·7405751
26	7·7293279	7·7293342	56	7·7409510	7·7409576
27	7·7297204	7·7297267	57	7·7413331	7·7413397
28	7·7301125	7·7301188	58	7·7417149	7·7417215
29	7·7305043	7·7305106	59	7·7420964	7·7421030

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19 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.7424775	7.7424841
1	7.7428583	7.7428649
2	7.7432388	7.7432454
3	7.7436189	7.7436255
4	7.7439987	7.7440053
5	7.7443781	7.7443848
6	7.7447573	7.7447640
7	7.7451360	7.7451428
8	7.7455145	7.7455212
9	7.7458926	7.7458994
10	7.7462705	7.7462772
11	7.7466479	7.7466547
12	7.7470251	7.7470319
13	7.7474019	7.7474087
14	7.7477784	7.7477852
15	7.7481546	7.7481614
16	7.7485304	7.7485372
17	7.7489059	7.7489128
18	7.7492811	7.7492880
19	7.7496560	7.7496629
20	7.7500306	7.7500374
21	7.7504048	7.7504117
22	7.7507787	7.7507856
23	7.7511523	7.7511592
24	7.7515255	7.7515325
25	7.7518985	7.7519054
26	7.7522711	7.7522780
27	7.7526434	7.7526504
28	7.7530154	7.7530224
29	7.7533871	7.7533940

19 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.7537584	7.7537654
31	7.7541294	7.7541364
32	7.7545001	7.7545072
33	7.7548705	7.7548776
34	7.7552406	7.7552477
35	7.7556104	7.7556174
36	7.7559798	7.7559869
37	7.7563490	7.7563560
38	7.7567178	7.7567249
39	7.7570863	7.7570934
40	7.7574545	7.7574616
41	7.7578224	7.7578295
42	7.7581900	7.7581971
43	7.7585572	7.7585644
44	7.7589242	7.7589313
45	7.7592908	7.7592980
46	7.7596572	7.7596643
47	7.7600232	7.7600304
48	7.7603889	7.7603961
49	7.7607543	7.7607615
50	7.7611194	7.7611266
51	7.7614842	7.7614915
52	7.7618487	7.7618560
53	7.7622129	7.7622202
54	7.7625768	7.7625840
55	7.7629403	7.7629476
56	7.7633036	7.7633109
57	7.7636666	7.7636739
58	7.7640292	7.7640366
59	7.7643916	7.7643989

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Secund.	20 Minut. Log. Sin.	Log. Tang.	Secund.	20 Minut. Log. Sin.	Log. Tang.
0	7.7647537	7.7647610	30	7.7754774	7.7754851
1	7.7651154	7.7651228	31	7.7758303	7.7758381
2	7.7654769	7.7654843	32	7.7761830	7.7761907
3	7.7658380	7.7658454	33	7.7765354	7.7765431
4	7.7661989	7.7662063	34	7.7768874	7.7768952
5	7.7665594	7.7665669	35	7.7772392	7.7772470
6	7.7669197	7.7669271	36	7.7775907	7.7775985
7	7.7672797	7.7672871	37	7.7779420	7.7779498
8	7.7676393	7.7676468	38	7.7782929	7.7783007
9	7.7679987	7.7680061	39	7.7786436	7.7786514
10	7.7683577	7.7683652	40	7.7789939	7.7790018
11	7.7687165	7.7687240	41	7.7793440	7.7793519
12	7.7690750	7.7690825	42	7.7796938	7.7797017
13	7.7694332	7.7694407	43	7.7800434	7.7800513
14	7.7697910	7.7697986	44	7.7803926	7.7804005
15	7.7701486	7.7701562	45	7.7807416	7.7807495
16	7.7705059	7.7705135	46	7.7810903	7.7810982
17	7.7708629	7.7708705	47	7.7814387	7.7814466
18	7.7712196	7.7712272	48	7.7817868	7.7817948
19	7.7715760	7.7715836	49	7.7821347	7.7821426
20	7.7719322	7.7719398	50	7.7824822	7.7824902
21	7.7722880	7.7722956	51	7.7828295	7.7828375
22	7.7726435	7.7726512	52	7.7831765	7.7831845
23	7.7729988	7.7730064	53	7.7835233	7.7835313
24	7.7733537	7.7733614	54	7.7838697	7.7838778
25	7.7737084	7.7737161	55	7.7842159	7.7842240
26	7.7740628	7.7740705	56	7.7845618	7.7845699
27	7.7744169	7.7744246	57	7.7849075	7.7849155
28	7.7747707	7.7747784	58	7.7852528	7.7852609
29	7.7751242	7.7751319	59	7.7855979	7.7856060

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Secund.	21 Minut. Log. Sin.	21 Minut. Log. Tang.	Secund.	21 Minut. Log. Sin.	21 Minut. Log. Tang.
0	7.7859427	7.7859508	30	7.7961617	7.7961702
1	7.7862872	7.7862954	31	7.7964983	7.7965068
2	7.7866315	7.7866396	32	7.7968345	7.7968431
3	7.7869755	7.7869836	33	7.7971705	7.7971791
4	7.7873192	7.7873274	34	7.7975063	7.7975148
5	7.7876627	7.7876708	35	7.7978418	7.7978503
6	7.7880058	7.7880140	36	7.7981770	7.7981856
7	7.7883488	7.7883569	37	7.7985120	7.7985206
8	7.7886914	7.7886996	38	7.7988467	7.7988553
9	7.7890337	7.7890420	39	7.7991811	7.7991898
10	7.7893758	7.7893841	40	7.7995153	7.7995240
11	7.7897177	7.7897259	41	7.7998493	7.7998579
12	7.7900592	7.7900675	42	7.8001830	7.8001916
13	7.7904005	7.7904088	43	7.8005164	7.8005251
14	7.7907415	7.7907498	44	7.8008496	7.8008582
15	7.7910823	7.7910906	45	7.8011825	7.8011912
16	7.7914228	7.7914311	46	7.8015151	7.8015238
17	7.7917630	7.7917713	47	7.8018475	7.8018563
18	7.7921029	7.7921113	48	7.8021797	7.8021884
19	7.7924426	7.7924510	49	7.8025116	7.8025203
20	7.7927820	7.7927904	50	7.8028432	7.8028520
21	7.7931212	7.7931296	51	7.8031746	7.8031834
22	7.7934601	7.7934685	52	7.8035058	7.8035146
23	7.7937987	7.7938071	53	7.8038367	7.8038455
24	7.7941371	7.7941455	54	7.8041673	7.8041761
25	7.7944752	7.7944836	55	7.8044977	7.8045065
26	7.7948130	7.7948215	56	7.8048278	7.8048366
27	7.7951506	7.7951590	57	7.8051577	7.8051665
28	7.7954879	7.7954964	58	7.8054873	7.8054962
29	7.7958250	7.7958334	59	7.8058167	7.8058256

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Secund.	22 Minut. Log. Sin.	Log. Tang.	Secund.	22 Minut. Log. Sin.	Log. Tang.
0	7.8061458	7.8061547	30	7.8159055	7.8159148
1	7.8064747	7.8064836	31	7.8162271	7.8162364
2	7.8068033	7.8068123	32	7.8165484	7.8165578
3	7.8071317	7.8071407	33	7.8168695	7.8168789
4	7.8074599	7.8074688	34	7.8171904	7.8171998
5	7.8077878	7.8077967	35	7.8175110	7.8175204
6	7.8081154	7.8081244	36	7.8178314	7.8178408
7	7.8084428	7.8084518	37	7.8181516	7.8181610
8	7.8087699	7.8087789	38	7.8184715	7.8184809
9	7.8090968	7.8091059	39	7.8187912	7.8188006
10	7.8094235	7.8094325	40	7.8191106	7.8191201
11	7.8097499	7.8097590	41	7.8194298	7.8194393
12	7.8100761	7.8100851	42	7.8197488	7.8197583
13	7.8104020	7.8104111	43	7.8200676	7.8200770
14	7.8107277	7.8107368	44	7.8203861	7.8203956
15	7.8110531	7.8110622	45	7.8207043	7.8207139
16	7.8113783	7.8113874	46	7.8210224	7.8210319
17	7.8117032	7.8117124	47	7.8213402	7.8213497
18	7.8120279	7.8120371	48	7.8216578	7.8216673
19	7.8123524	7.8123615	49	7.8219751	7.8219847
20	7.8126766	7.8126858	50	7.8222922	7.8223018
21	7.8130006	7.8130098	51	7.8226091	7.8226187
22	7.8133243	7.8133335	52	7.8229258	7.8229354
23	7.8136478	7.8136570	53	7.8232422	7.8232518
24	7.8139711	7.8139803	54	7.8235584	7.8235680
25	7.8142941	7.8143033	55	7.8238743	7.8238840
26	7.8146168	7.8146261	56	7.8241901	7.8241997
27	7.8149394	7.8149486	57	7.8245056	7.8245153
28	7.8152617	7.8152709	58	7.8248209	7.8248305
29	7.8155837	7.8155930	59	7.8251359	7.8251456

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23 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.8254507	7.8254604
1	7.8257653	7.8257750
2	7.8260797	7.8260894
3	7.8263938	7.8264036
4	7.8267077	7.8267175
5	7.8270214	7.8270312
6	7.8273348	7.8273446
7	7.8276481	7.8276579
8	7.8279611	7.8279709
9	7.8282738	7.8282837
10	7.8285864	7.8285962
11	7.8288987	7.8289086
12	7.8292108	7.8292207
13	7.8295227	7.8295326
14	7.8298343	7.8298443
15	7.8301458	7.8301557
16	7.8304570	7.8304669
17	7.8307680	7.8307779
18	7.8310787	7.8310887
19	7.8313893	7.8313992
20	7.8316996	7.8317096
21	7.8320097	7.8320197
22	7.8323195	7.8323296
23	7.8326292	7.8326392
24	7.8329386	7.8329487
25	7.8332478	7.8332579
26	7.8335568	7.8335669
27	7.8338656	7.8338757
28	7.8341741	7.8341843
29	7.8344825	7.8344926

23 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.8347906	7.8348007
31	7.8350985	7.8351087
32	7.8354062	7.8354163
33	7.8357136	7.8357238
34	7.8360209	7.8360311
35	7.8363279	7.8363381
36	7.8366347	7.8366449
37	7.8369413	7.8369515
38	7.8372477	7.8372580
39	7.8375538	7.8375641
40	7.8378598	7.8378701
41	7.8381655	7.8381758
42	7.8384710	7.8384813
43	7.8387763	7.8387867
44	7.8390814	7.8390918
45	7.8393863	7.8393966
46	7.8396909	7.8397013
47	7.8399954	7.8400058
48	7.8402996	7.8403100
49	7.8406036	7.8406140
50	7.8409074	7.8409179
51	7.8412110	7.8412215
52	7.8415144	7.8415249
53	7.8418176	7.8418280
54	7.8421205	7.8421310
55	7.8424233	7.8424338
56	7.8427258	7.8427363
57	7.8430281	7.8430387
58	7.8433302	7.8433408
59	7.8436321	7.8436427

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24 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.8439338	7.8439444
1	7.8442353	7.8442459
2	7.8445366	7.8445472
3	7.8448377	7.8448483
4	7.8451385	7.8451492
5	7.8454392	7.8454498
6	7.8457396	7.8457503
7	7.8460398	7.8460505
8	7.8463399	7.8463506
9	7.8466397	7.8466504
10	7.8469393	7.8469500
11	7.8472387	7.8472494
12	7.8475379	7.8475487
13	7.8478369	7.8478477
14	7.8481357	7.8481465
15	7.8484343	7.8484451
16	7.8487326	7.8487435
17	7.8490308	7.8490416
18	7.8493288	7.8493396
19	7.8496265	7.8496374
20	7.8499241	7.8499350
21	7.8502215	7.8502323
22	7.8505186	7.8505295
23	7.8508156	7.8508265
24	7.8511123	7.8511232
25	7.8514088	7.8514198
26	7.8517052	7.8517161
27	7.8520013	7.8520123
28	7.8522973	7.8523083
29	7.8525930	7.8526040
30	7.8528885	7.8528996
31	7.8531839	7.8531949
32	7.8534790	7.8534900
33	7.8537739	7.8537850
34	7.8540687	7.8540797
35	7.8543632	7.8543743
36	7.8546575	7.8546686
37	7.8549517	7.8549628
38	7.8552456	7.8552567
39	7.8555393	7.8555505
40	7.8558329	7.8558440
41	7.8561262	7.8561374
42	7.8564193	7.8564305
43	7.8567123	7.8567235
44	7.8570050	7.8570163
45	7.8572976	7.8573088
46	7.8575899	7.8576012
47	7.8578821	7.8578934
48	7.8581740	7.8581853
49	7.8584658	7.8584771
50	7.8587574	7.8587687
51	7.8590487	7.8590601
52	7.8593399	7.8593513
53	7.8596309	7.8596423
54	7.8599217	7.8599331
55	7.8602123	7.8602237
56	7.8605027	7.8605141
57	7.8607929	7.8608043
58	7.8610829	7.8610943
59	7.8613727	7.8613841

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25 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.8616623	7.8616738
1	7.8619517	7.8619632
2	7.8622410	7.8622525
3	7.8625300	7.8625415
4	7.8628189	7.8628304
5	7.8631075	7.8631191
6	7.8633960	7.8634076
7	7.8636843	7.8636958
8	7.8639723	7.8639839
9	7.8642602	7.8642719
10	7.8645479	7.8645596
11	7.8648354	7.8648471
12	7.8651228	7.8651344
13	7.8654099	7.8654216
14	7.8656968	7.8657085
15	7.8659836	7.8659953
16	7.8662702	7.8662819
17	7.8665565	7.8665683
18	7.8668427	7.8668545
19	7.8671287	7.8671405
20	7.8674145	7.8674263
21	7.8677001	7.8677120
22	7.8679856	7.8679974
23	7.8682708	7.8682827
24	7.8685559	7.8685677
25	7.8688408	7.8688526
26	7.8691254	7.8691373
27	7.8694099	7.8694218
28	7.8696942	7.8697062
29	7.8699784	7.8699903

25 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.8702623	7.8702743
31	7.8705461	7.8705580
32	7.8708296	7.8708416
33	7.8711130	7.8711250
34	7.8713962	7.8714082
35	7.8716792	7.8716913
36	7.8719621	7.8719741
37	7.8722447	7.8722568
38	7.8725272	7.8725393
39	7.8728095	7.8728215
40	7.8730916	7.8731037
41	7.8733735	7.8733856
42	7.8736552	7.8736673
43	7.8739367	7.8739489
44	7.8742181	7.8742303
45	7.8744993	7.8745115
46	7.8747803	7.8747925
47	7.8750611	7.8750733
48	7.8753417	7.8753540
49	7.8756222	7.8756344
50	7.8759025	7.8759147
51	7.8761826	7.8761949
52	7.8764625	7.8764748
53	7.8767422	7.8767545
54	7.8770218	7.8770341
55	7.8773011	7.8773135
56	7.8775803	7.8775927
57	7.8778594	7.8778717
58	7.8781382	7.8781506
59	7.8784168	7.8784293

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26 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.8786953	7.8787077
1	7.8789736	7.8789861
2	7.8792517	7.8792642
3	7.8795297	7.8795422
4	7.8798075	7.8798199
5	7.8800850	7.8800975
6	7.8803625	7.8803750
7	7.8806397	7.8806522
8	7.8809167	7.8809293
9	7.8811936	7.8812062
10	7.8814703	7.8814829
11	7.8817469	7.8817594
12	7.8820232	7.8820358
13	7.8822994	7.8823120
14	7.8825754	7.8825880
15	7.8828512	7.8828639
16	7.8831269	7.8831395
17	7.8834023	7.8834150
18	7.8836776	7.8836903
19	7.8839528	7.8839655
20	7.8842277	7.8842404
21	7.8845025	7.8845152
22	7.8847771	7.8847899
23	7.8850515	7.8850643
24	7.8853258	7.8853386
25	7.8855999	7.8856127
26	7.8858738	7.8858866
27	7.8861475	7.8861604
28	7.8864211	7.8864339
29	7.8866945	7.8867074
30	7.8869677	7.8869806
31	7.8872407	7.8872537
32	7.8875136	7.8875266
33	7.8877863	7.8877993
34	7.8880589	7.8880718
35	7.8883312	7.8883442
36	7.8886034	7.8886164
37	7.8888754	7.8888885
38	7.8891473	7.8891603
39	7.8894190	7.8894320
40	7.8896905	7.8897036
41	7.8899618	7.8899749
42	7.8902330	7.8902461
43	7.8905040	7.8905171
44	7.8907749	7.8907880
45	7.8910455	7.8910587
46	7.8913160	7.8913292
47	7.8915864	7.8915995
48	7.8918565	7.8918697
49	7.8921265	7.8921397
50	7.8923963	7.8924096
51	7.8926660	7.8926792
52	7.8929355	7.8929487
53	7.8932048	7.8932181
54	7.8934740	7.8934873
55	7.8937430	7.8937563
56	7.8940118	7.8940251
57	7.8942804	7.8942938
58	7.8945489	7.8945623
59	7.8948173	7.8948306

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Secund.	27 Minut. Log. Sin.	Log. Tang.
0	7.8950854	7.8950988
1	7.8953534	7.8953668
2	7.8956212	7.8956347
3	7.8958889	7.8959023
4	7.8961564	7.8961699
5	7.8964237	7.8964372
6	7.8966909	7.8967044
7	7.8969579	7.8969714
8	7.8972248	7.8972383
9	7.8974914	7.8975050
10	7.8977580	7.8977715
11	7.8980243	7.8980379
12	7.8982905	7.8983041
13	7.8985565	7.8985701
14	7.8988224	7.8988360
15	7.8990881	7.8991017
16	7.8993536	7.8993673
17	7.8996190	7.8996327
18	7.8998842	7.8998979
19	7.9001493	7.9001630
20	7.9004141	7.9004279
21	7.9006789	7.9006926
22	7.9009434	7.9009572
23	7.9012078	7.9012216
24	7.9014721	7.9014859
25	7.9017362	7.9017500
26	7.9020001	7.9020139
27	7.9022639	7.9022777
28	7.9025275	7.9025413
29	7.9027909	7.9028048

Secund.	27 Minut. Log. Sin.	Log. Tang.
30	7.9030542	7.9030681
31	7.9033173	7.9033312
32	7.9035803	7.9035942
33	7.9038431	7.9038570
34	7.9041057	7.9041197
35	7.9043682	7.9043822
36	7.9046305	7.9046445
37	7.9048927	7.9049067
38	7.9051547	7.9051687
39	7.9054166	7.9054306
40	7.9056783	7.9056923
41	7.9059398	7.9059539
42	7.9062012	7.9062153
43	7.9064624	7.9064765
44	7.9067235	7.9067376
45	7.9069844	7.9069985
46	7.9072451	7.9072593
47	7.9075057	7.9075199
48	7.9077662	7.9077804
49	7.9080265	7.9080407
50	7.9082866	7.9083008
51	7.9085466	7.9085608
52	7.9088064	7.9088207
53	7.9090660	7.9090803
54	7.9093256	7.9093399
55	7.9095849	7.9095992
56	7.9098441	7.9098584
57	7.9101031	7.9101175
58	7.9103620	7.9103764
59	7.9106208	7.9106352

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Secund.	28 Minut. Log. Sin.	28 Minut. Log. Tang.	Secund.	28 Minut. Log. Sin.	28 Minut. Log. Tang.
0	7.9108793	7.9108938	30	7.9185660	7.9185809
1	7.9111378	7.9111522	31	7.9188199	7.9188348
2	7.9113960	7.9114105	32	7.9190736	7.9190886
3	7.9116542	7.9116686	33	7.9193272	7.9193422
4	7.9119121	7.9119266	34	7.9195807	7.9195957
5	7.9121699	7.9121844	35	7.9198340	7.9198490
6	7.9124276	7.9124421	36	7.9200871	7.9201022
7	7.9126851	7.9126996	37	7.9203401	7.9203552
8	7.9129425	7.9129570	38	7.9205930	7.9206081
9	7.9131997	7.9132142	39	7.9208457	7.9208608
10	7.9134567	7.9134713	40	7.9210983	7.9211134
11	7.9137136	7.9137282	41	7.9213507	7.9213658
12	7.9139704	7.9139850	42	7.9216030	7.9216181
13	7.9142269	7.9142416	43	7.9218551	7.9218702
14	7.9144834	7.9144980	44	7.9221071	7.9221222
15	7.9147397	7.9147543	45	7.9223589	7.9223741
16	7.9149958	7.9150105	46	7.9226106	7.9226258
17	7.9152518	7.9152665	47	7.9228621	7.9228774
18	7.9155076	7.9155224	48	7.9231135	7.9231288
19	7.9157633	7.9157781	49	7.9233648	7.9233800
20	7.9160189	7.9160336	50	7.9236159	7.9236312
21	7.9162743	7.9162890	51	7.9238668	7.9238821
22	7.9165295	7.9165443	52	7.9241177	7.9241330
23	7.9167846	7.9167994	53	7.9243683	7.9243836
24	7.9170395	7.9170543	54	7.9246188	7.9246342
25	7.9172943	7.9173091	55	7.9248692	7.9248846
26	7.9175489	7.9175638	56	7.9251195	7.9251348
27	7.9178034	7.9178183	57	7.9253696	7.9253850
28	7.9180578	7.9180727	58	7.9256195	7.9256349
29	7.9183120	7.9183269	59	7.9258693	7.9258847

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29 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9261190	7.9261344
1	7.9263685	7.9263840
2	7.9266179	7.9266333
3	7.9268671	7.9268826
4	7.9271162	7.9271317
5	7.9273651	7.9273807
6	7.9276139	7.9276295
7	7.9278626	7.9278782
8	7.9281111	7.9281267
9	7.9283595	7.9283751
10	7.9286077	7.9286233
11	7.9288558	7.9288714
12	7.9291037	7.9291194
13	7.9293516	7.9293672
14	7.9295992	7.9296149
15	7.9298467	7.9298625
16	7.9300941	7.9301099
17	7.9303414	7.9303571
18	7.9305885	7.9306043
19	7.9308354	7.9308512
20	7.9310823	7.9310981
21	7.9313289	7.9313448
22	7.9315755	7.9315913
23	7.9318219	7.9318378
24	7.9320682	7.9320840
25	7.9323143	7.9323302
26	7.9325603	7.9325762
27	7.9328061	7.9328220
28	7.9330518	7.9330678
29	7.9332974	7.9333133

29 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.9335428	7.9335588
31	7.9337881	7.9338041
32	7.9340332	7.9340493
33	7.9342783	7.9342943
34	7.9345231	7.9345392
35	7.9347679	7.9347839
36	7.9350125	7.9350286
37	7.9352569	7.9352730
38	7.9355012	7.9355174
39	7.9357454	7.9357616
40	7.9359895	7.9360057
41	7.9362334	7.9362496
42	7.9364772	7.9364934
43	7.9367208	7.9367370
44	7.9369643	7.9369805
45	7.9372077	7.9372239
46	7.9374509	7.9374672
47	7.9376940	7.9377103
48	7.9379369	7.9379533
49	7.9381798	7.9381961
50	7.9384224	7.9384388
51	7.9386650	7.9386814
52	7.9389074	7.9389238
53	7.9391497	7.9391661
54	7.9393918	7.9394083
55	7.9396338	7.9396503
56	7.9398757	7.9398922
57	7.9401175	7.9401339
58	7.9403591	7.9403756
59	7.9406005	7.9406170

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30 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9408419	7.9408584
1	7.9410831	7.9410996
2	7.9413241	7.9413407
3	7.9415651	7.9415817
4	7.9418059	7.9418225
5	7.9420465	7.9420632
6	7.9422871	7.9423037
7	7.9425275	7.9425441
8	7.9427677	7.9427844
9	7.9430079	7.9430246
10	7.9432479	7.9432646
11	7.9434877	7.9435045
12	7.9437275	7.9437442
13	7.9439671	7.9439839
14	7.9442066	7.9442233
15	7.9444459	7.9444627
16	7.9446851	7.9447019
17	7.9449242	7.9449410
18	7.9451631	7.9451800
19	7.9454019	7.9454188
20	7.9456406	7.9456575
21	7.9458792	7.9458961
22	7.9461176	7.9461345
23	7.9463559	7.9463728
24	7.9465940	7.9466110
25	7.9468321	7.9468491
26	7.9470700	7.9470870
27	7.9473077	7.9473248
28	7.9475454	7.9475624
29	7.9477829	7.9478000

30 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.9480203	7.9480374
31	7.9482575	7.9482746
32	7.9484946	7.9485118
33	7.9487316	7.9487488
34	7.9489685	7.9489856
35	7.9492052	7.9492224
36	7.9494418	7.9494590
37	7.9496783	7.9496955
38	7.9499146	7.9499319
39	7.9501508	7.9501681
40	7.9503869	7.9504042
41	7.9506229	7.9506402
42	7.9508587	7.9508760
43	7.9510944	7.9511118
44	7.9513300	7.9513474
45	7.9515654	7.9515828
46	7.9518008	7.9518182
47	7.9520360	7.9520534
48	7.9522710	7.9522885
49	7.9525060	7.9525234
50	7.9527408	7.9527582
51	7.9529755	7.9529929
52	7.9532100	7.9532275
53	7.9534444	7.9534620
54	7.9536787	7.9536963
55	7.9539129	7.9539305
56	7.9541470	7.9541646
57	7.9543809	7.9543985
58	7.9546147	7.9546323
59	7.9548484	7.9548660

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31 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9550819	7.9550996
1	7.9553153	7.9553330
2	7.9555486	7.9555663
3	7.9557818	7.9557995
4	7.9560149	7.9560326
5	7.9562478	7.9562655
6	7.9564806	7.9564984
7	7.9567133	7.9567310
8	7.9569458	7.9569636
9	7.9571782	7.9571961
10	7.9574105	7.9574284
11	7.9576427	7.9576606
12	7.9578747	7.9578926
13	7.9581067	7.9581246
14	7.9583385	7.9583564
15	7.9585702	7.9585881
16	7.9588017	7.9588197
17	7.9590331	7.9590511
18	7.9592645	7.9592825
19	7.9594956	7.9595137
20	7.9597267	7.9597447
21	7.9599576	7.9599757
22	7.9601885	7.9602065
23	7.9604192	7.9604373
24	7.9606497	7.9606678
25	7.9608802	7.9608983
26	7.9611105	7.9611287
27	7.9613407	7.9613589
28	7.9615708	7.9615890
29	7.9618008	7.9618190

31 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.9620306	7.9620488
31	7.9622603	7.9622786
32	7.9624899	7.9625082
33	7.9627194	7.9627377
34	7.9629487	7.9629670
35	7.9631780	7.9631963
36	7.9634071	7.9634254
37	7.9636361	7.9636544
38	7.9638649	7.9638833
39	7.9640937	7.9641121
40	7.9643223	7.9643408
41	7.9645508	7.9645693
42	7.9647792	7.9647977
43	7.9650075	7.9650260
44	7.9652356	7.9652541
45	7.9654637	7.9654822
46	7.9656916	7.9657101
47	7.9659194	7.9659379
48	7.9661470	7.9661656
49	7.9663746	7.9663932
50	7.9666020	7.9666206
51	7.9668293	7.9668480
52	7.9670565	7.9670752
53	7.9672836	7.9673023
54	7.9675106	7.9675293
55	7.9677374	7.9677561
56	7.9679641	7.9679829
57	7.9681907	7.9682095
58	7.9684172	7.9684360
59	7.9686436	7.9686624

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32 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9688698	7.9688886
1	7.9690960	7.9691148
2	7.9693220	7.9693408
3	7.9695479	7.9695667
4	7.9697736	7.9697925
5	7.9699993	7.9700182
6	7.9702248	7.9702438
7	7.9704503	7.9704692
8	7.9706756	7.9706945
9	7.9709008	7.9709198
10	7.9711258	7.9711449
11	7.9713508	7.9713698
12	7.9715756	7.9715947
13	7.9718004	7.9718194
14	7.9720250	7.9720441
15	7.9722495	7.9722686
16	7.9724738	7.9724930
17	7.9726981	7.9727173
18	7.9729222	7.9729414
19	7.9731463	7.9731655
20	7.9733702	7.9733894
21	7.9735940	7.9736132
22	7.9738177	7.9738369
23	7.9740412	7.9740605
24	7.9742647	7.9742840
25	7.9744880	7.9745073
26	7.9747113	7.9747306
27	7.9749344	7.9749537
28	7.9751574	7.9751767
29	7.9753802	7.9753996
30	7.9756030	7.9756224
31	7.9758257	7.9758451
32	7.9760482	7.9760676
33	7.9762706	7.9762901
34	7.9764929	7.9765124
35	7.9767151	7.9767346
36	7.9769372	7.9769567
37	7.9771592	7.9771787
38	7.9773810	7.9774006
39	7.9776028	7.9776224
40	7.9778244	7.9778440
41	7.9780459	7.9780655
42	7.9782673	7.9782870
43	7.9784886	7.9785083
44	7.9787098	7.9787295
45	7.9789309	7.9789506
46	7.9791518	7.9791715
47	7.9793726	7.9793924
48	7.9795934	7.9796131
49	7.9798140	7.9798338
50	7.9800345	7.9800543
51	7.9802549	7.9802747
52	7.9804752	7.9804950
53	7.9806953	7.9807152
54	7.9809154	7.9809353
55	7.9811353	7.9811552
56	7.9813552	7.9813751
57	7.9815749	7.9815948
58	7.9817945	7.9818145
59	7.9820140	7.9820340

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33 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9822334	7.9822534
1	7.9824527	7.9824727
2	7.9826718	7.9826919
3	7.9828909	7.9829110
4	7.9831098	7.9831299
5	7.9833287	7.9833488
6	7.9835474	7.9835675
7	7.9837660	7.9837862
8	7.9839845	7.9840047
9	7.9842029	7.9842231
10	7.9844212	7.9844414
11	7.9846394	7.9846596
12	7.9848574	7.9848777
13	7.9850754	7.9850957
14	7.9852933	7.9853135
15	7.9855110	7.9855313
16	7.9857286	7.9857490
17	7.9859461	7.9859665
18	7.9861636	7.9861839
19	7.9863809	7.9864013
20	7.9865981	7.9866185
21	7.9868151	7.9868356
22	7.9870321	7.9870526
23	7.9872490	7.9872695
24	7.9874658	7.9874862
25	7.9876824	7.9877029
26	7.9878989	7.9879195
27	7.9881154	7.9881359
28	7.9883317	7.9883523
29	7.9885479	7.9885685

33 Minut.

Secund.	Log. Sin.	Log. Tang.
30	7.9887641	7.9887847
31	7.9889801	7.9890007
32	7.9891960	7.9892166
33	7.9894117	7.9894324
34	7.9896274	7.9896481
35	7.9898430	7.9898637
36	7.9900585	7.9900792
37	7.9902738	7.9902946
38	7.9904891	7.9905099
39	7.9907043	7.9907251
40	7.9909193	7.9909401
41	7.9911342	7.9911551
42	7.9913491	7.9913699
43	7.9915638	7.9915847
44	7.9917784	7.9917993
45	7.9919929	7.9920138
46	7.9922073	7.9922283
47	7.9924216	7.9924426
48	7.9926358	7.9926568
49	7.9928499	7.9928709
50	7.9930639	7.9930849
51	7.9932778	7.9932988
52	7.9934915	7.9935126
53	7.9937052	7.9937263
54	7.9939188	7.9939399
55	7.9941322	7.9941534
56	7.9943456	7.9943667
57	7.9945588	7.9945800
58	7.9947720	7.9947932
59	7.9949850	7.9950062

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34 Minut.

Secund.	Log. Sin.	Log. Tang.
0	7.9951980	7.9952192
1	7.9954108	7.9954320
2	7.9956235	7.9956448
3	7.9958361	7.9958574
4	7.9960487	7.9960700
5	7.9962611	7.9962824
6	7.9964734	7.9964947
7	7.9966856	7.9967070
8	7.9968977	7.9969191
9	7.9971097	7.9971311
10	7.9973216	7.9973430
11	7.9975334	7.9975548
12	7.9977451	7.9977666
13	7.9979566	7.9979782
14	7.9981681	7.9981897
15	7.9983795	7.9984011
16	7.9985908	7.9986124
17	7.9988020	7.9988236
18	7.9990130	7.9990346
19	7.9992240	7.9992456
20	7.9994349	7.9994565
21	7.9996456	7.9996673
22	7.9998563	7.9998780
23	8.0000669	8.0000886
24	8.0002773	8.0002991
25	8.0004877	8.0005094
26	8.0006979	8.0007197
27	8.0009081	8.0009299
28	8.0011181	8.0011400
29	8.0013281	8.0013499
30	8.0015379	8.0015598
31	8.0017477	8.0017696
32	8.0019573	8.0019792
33	8.0021669	8.0021888
34	8.0023763	8.0023983
35	8.0025856	8.0026076
36	8.0027949	8.0028169
37	8.0030040	8.0030260
38	8.0032131	8.0032351
39	8.0034220	8.0034441
40	8.0036308	8.0036529
41	8.0038396	8.0038617
42	8.0040482	8.0040703
43	8.0042568	8.0042789
44	8.0044652	8.0044874
45	8.0046735	8.0046957
46	8.0048818	8.0049040
47	8.0050899	8.0051121
48	8.0052979	8.0053202
49	8.0055059	8.0055282
50	8.0057137	8.0057360
51	8.0059215	8.0059438
52	8.0061291	8.0061514
53	8.0063366	8.0063590
54	8.0065441	8.0065665
55	8.0067514	8.0067738
56	8.0069587	8.0069811
57	8.0071658	8.0071883
58	8.0073729	8.0073953
59	8.0075798	8.0076023

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35 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.0077867	8.0078092
1	8.0079934	8.0080159
2	8.0082001	8.0082226
3	8.0084066	8.0084292
4	8.0086131	8.0086357
5	8.0088194	8.0088420
6	8.0090257	8.0090483
7	8.0092318	8.0092545
8	8.0094379	8.0094606
9	8.0096439	8.0096666
10	8.0098497	8.0098725
11	8.0100555	8.0100783
12	8.0102612	8.0102840
13	8.0104668	8.0104896
14	8.0106722	8.0106951
15	8.0108776	8.0109005
16	8.0110829	8.0111058
17	8.0112881	8.0113110
18	8.0114932	8.0115161
19	8.0116982	8.0117211
20	8.0119031	8.0119260
21	8.0121079	8.0121308
22	8.0123126	8.0123356
23	8.0125172	8.0125402
24	8.0127217	8.0127447
25	8.0129261	8.0129492
26	8.0131304	8.0131535
27	8.0133347	8.0133578
28	8.0135388	8.0135619
29	8.0137428	8.0137660

35 Minut.

Secund.	Log. Sin.	Log. Tang.
30	8.0139468	8.0139699
31	8.0141506	8.0141738
32	8.0143543	8.0143775
33	8.0145580	8.0145812
34	8.0147615	8.0147848
35	8.0149650	8.0149883
36	8.0151684	8.0151916
37	8.0153716	8.0153949
38	8.0155748	8.0155981
39	8.0157779	8.0158012
40	8.0159808	8.0160042
41	8.0161837	8.0162071
42	8.0163865	8.0164099
43	8.0165892	8.0166127
44	8.0167918	8.0168153
45	8.0169943	8.0170178
46	8.0171967	8.0172203
47	8.0173991	8.0174226
48	8.0176013	8.0176248
49	8.0178034	8.0178270
50	8.0180055	8.0180291
51	8.0182074	8.0182310
52	8.0184093	8.0184329
53	8.0186110	8.0186347
54	8.0188127	8.0188364
55	8.0190142	8.0190379
56	8.0192157	8.0192394
57	8.0194171	8.0194408
58	8.0196184	8.0196422
59	8.0198196	8.0198434

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Secund.	36 Minut. Log. Sin.	Log. Tang.
0	8.0200207	8.0200445
1	8.0202217	8.0202455
2	8.0204226	8.0204465
3	8.0206234	8.0206473
4	8.0208242	8.0208481
5	8.0210248	8.0210487
6	8.0212253	8.0212493
7	8.0214258	8.0214498
8	8.0216261	8.0216501
9	8.0218264	8.0218504
10	8.0220266	8.0220506
11	8.0222267	8.0222507
12	8.0224267	8.0224507
13	8.0226266	8.0226507
14	8.0228264	8.0228505
15	8.0230261	8.0230502
16	8.0232257	8.0232499
17	8.0234252	8.0234494
18	8.0236247	8.0236489
19	8.0238240	8.0238483
20	8.0240233	8.0240475
21	8.0242224	8.0242467
22	8.0244215	8.0244458
23	8.0246205	8.0246448
24	8.0248194	8.0248437
25	8.0250182	8.0250426
26	8.0252169	8.0252413
27	8.0254155	8.0254399
28	8.0256140	8.0256385
29	8.0258125	8.0258369

Secund.	36 Minut. Log. Sin.	Log. Tang.
30	8.0260108	8.0260353
31	8.0262091	8.0262336
32	8.0264072	8.0264318
33	8.0266053	8.0266299
34	8.0268033	8.0268279
35	8.0270012	8.0270258
36	8.0271990	8.0272236
37	8.0273967	8.0274213
38	8.0275943	8.0276190
39	8.0277919	8.0278166
40	8.0279893	8.0280140
41	8.0281867	8.0282114
42	8.0283839	8.0284087
43	8.0285811	8.0286059
44	8.0287782	8.0288030
45	8.0289752	8.0290000
46	8.0291721	8.0291969
47	8.0293689	8.0293938
48	8.0295656	8.0295905
49	8.0297623	8.0297872
50	8.0299588	8.0299838
51	8.0301553	8.0301802
52	8.0303517	8.0303766
53	8.0305479	8.0305729
54	8.0307441	8.0307692
55	8.0309403	8.0309653
56	8.0311363	8.0311613
57	8.0313322	8.0313573
58	8.0315280	8.0315531
59	8.0317238	8.0317489

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Secund.	37 Minut.	
	Log. Sin.	Log. Tang.
0	8.0319195	8.0319446
1	8.0321150	8.0321402
2	8.0323105	8.0323357
3	8.0325059	8.0325311
4	8.0327012	8.0327265
5	8.0328965	8.0329217
6	8.0330916	8.0331169
7	8.0332866	8.0333120
8	8.0334816	8.0335069
9	8.0336765	8.0337018
10	8.0338713	8.0338967
11	8.0340660	8.0340914
12	8.0342606	8.0342860
13	8.0344551	8.0344806
14	8.0346495	8.0346750
15	8.0348439	8.0348694
16	8.0350382	8.0350637
17	8.0352323	8.0352579
18	8.0354264	8.0354520
19	8.0356204	8.0356460
20	8.0358143	8.0358400
21	8.0360082	8.0360338
22	8.0362019	8.0362276
23	8.0363956	8.0364213
24	8.0365892	8.0366149
25	8.0367826	8.0368084
26	8.0369760	8.0370018
27	8.0371693	8.0371951
28	8.0373626	8.0373884
29	8.0375557	8.0375815
30	8.0377488	8.0377746
31	8.0379417	8.0379676
32	8.0381346	8.0381605
33	8.0383274	8.0383533
34	8.0385201	8.0385461
35	8.0387128	8.0387387
36	8.0389053	8.0389313
37	8.0390978	8.0391238
38	8.0392901	8.0393162
39	8.0394824	8.0395085
40	8.0396746	8.0397007
41	8.0398667	8.0398928
42	8.0400588	8.0400849
43	8.0402507	8.0402768
44	8.0404426	8.0404687
45	8.0406343	8.0406605
46	8.0408260	8.0408522
47	8.0410176	8.0410439
48	8.0412092	8.0412354
49	8.0414006	8.0414269
50	8.0415920	8.0416183
51	8.0417832	8.0418096
52	8.0419744	8.0420008
53	8.0421655	8.0421919
54	8.0423565	8.0423829
55	8.0425475	8.0425739
56	8.0427383	8.0427648
57	8.0429291	8.0429555
58	8.0431198	8.0431462
59	8.0433104	8.0433369

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Secund.	38 Minut. Log. Sin.	Log. Tang.	Secund.	38 Minut. Log. Sin.	Log. Tang.
0	8.0435009	8.0435274	30	8.0491778	8.0492050
1	8.0436913	8.0437179	31	8.0493657	8.0493930
2	8.0438816	8.0439082	32	8.0495536	8.0495809
3	8.0440719	8.0440985	33	8.0497414	8.0497687
4	8.0442621	8.0442887	34	8.0499291	8.0499564
5	8.0444522	8.0444788	35	8.0501167	8.0501441
6	8.0446422	8.0446689	36	8.0503043	8.0503317
7	8.0448321	8.0448588	37	8.0504918	8.0505192
8	8.0450220	8.0450487	38	8.0506792	8.0507066
9	8.0452117	8.0452385	39	8.0508665	8.0508939
10	8.0454014	8.0454282	40	8.0510537	8.0510812
11	8.0455910	8.0456178	41	8.0512408	8.0512683
12	8.0457805	8.0458074	42	8.0514279	8.0514554
13	8.0459700	8.0459968	43	8.0516149	8.0516424
14	8.0461593	8.0461862	44	8.0518018	8.0518294
15	8.0463486	8.0463755	45	8.0519886	8.0520162
16	8.0465378	8.0465647	46	8.0521754	8.0522030
17	8.0467269	8.0467538	47	8.0523620	8.0523897
18	8.0469159	8.0469429	48	8.0525486	8.0525763
19	8.0471048	8.0471318	49	8.0527351	8.0527628
20	8.0472937	8.0473207	50	8.0529216	8.0529493
21	8.0474825	8.0475095	51	8.0531079	8.0531356
22	8.0476712	8.0476982	52	8.0532942	8.0533219
23	8.0478598	8.0478869	53	8.0534803	8.0535081
24	8.0480483	8.0480754	54	8.0536665	8.0536943
25	8.0482368	8.0482639	55	8.0538525	8.0538803
26	8.0484251	8.0484523	56	8.0540384	8.0540663
27	8.0486134	8.0486406	57	8.0542243	8.0542522
28	8.0488016	8.0488288	58	8.0544101	8.0544380
29	8.0489897	8.0490169	59	8.0545958	8.0546237

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39 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.0547814	8.0548094
1	8.0549670	8.0549949
2	8.0551524	8.0551804
3	8.0553378	8.0553658
4	8.0555231	8.0555512
5	8.0557084	8.0557364
6	8.0558935	8.0559216
7	8.0560786	8.0561067
8	8.0562636	8.0562917
9	8.0564485	8.0564767
10	8.0566333	8.0566615
11	8.0568181	8.0568463
12	8.0570028	8.0570310
13	8.0571874	8.0572156
14	8.0573719	8.0574002
15	8.0575563	8.0575846
16	8.0577407	8.0577690
17	8.0579250	8.0579534
18	8.0581092	8.0581376
19	8.0582933	8.0583217
20	8.0584774	8.0585058
21	8.0586614	8.0586898
22	8.0588453	8.0588737
23	8.0590291	8.0590576
24	8.0592128	8.0592414
25	8.0593965	8.0594250
26	8.0595801	8.0596087
27	8.0597636	8.0597922
28	8.0599470	8.0599756
29	8.0601304	8.0601590
30	8.0603137	8.0603423
31	8.0604969	8.0605255
32	8.0606800	8.0607087
33	8.0608630	8.0608918
34	8.0610460	8.0610748
35	8.0612289	8.0612577
36	8.0614117	8.0614405
37	8.0615944	8.0616233
38	8.0617771	8.0618060
39	8.0619597	8.0619886
40	8.0621422	8.0621711
41	8.0623246	8.0623536
42	8.0625070	8.0625359
43	8.0626892	8.0627182
44	8.0628714	8.0629005
45	8.0630536	8.0630826
46	8.0632356	8.0632647
47	8.0634176	8.0634467
48	8.0635995	8.0636286
49	8.0637813	8.0638104
50	8.0639630	8.0639922
51	8.0641447	8.0641739
52	8.0643263	8.0643555
53	8.0645078	8.0645371
54	8.0646893	8.0647185
55	8.0648706	8.0648999
56	8.0650519	8.0650812
57	8.0652331	8.0652625
58	8.0654143	8.0654436
59	8.0655953	8.0656247

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40 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.0657763	8.0658057
1	8.0659572	8.0659866
2	8.0661381	8.0661675
3	8.0663188	8.0663483
4	8.0664995	8.0665290
5	8.0666801	8.0667096
6	8.0668606	8.0668902
7	8.0670411	8.0670707
8	8.0672215	8.0672511
9	8.0674018	8.0674314
10	8.0675820	8.0676117
11	8.0677622	8.0677919
12	8.0679423	8.0679720
13	8.0681223	8.0681520
14	8.0683022	8.0683320
15	8.0684821	8.0685118
16	8.0686619	8.0686917
17	8.0688416	8.0688714
18	8.0690212	8.0690511
19	8.0692008	8.0692306
20	8.0693803	8.0694102
21	8.0695597	8.0695896
22	8.0697390	8.0697690
23	8.0699183	8.0699483
24	8.0700975	8.0701275
25	8.0702766	8.0703066
26	8.0704557	8.0704857
27	8.0706346	8.0706647
28	8.0708135	8.0708436
29	8.0709923	8.0710225
30	8.0711711	8.0712012
31	8.0713498	8.0713799
32	8.0715284	8.0715586
33	8.0717069	8.0717371
34	8.0718854	8.0719156
35	8.0720637	8.0720940
36	8.0722421	8.0722723
37	8.0724203	8.0724506
38	8.0725985	8.0726288
39	8.0727765	8.0728069
40	8.0729546	8.0729850
41	8.0731325	8.0731629
42	8.0733104	8.0733408
43	8.0734882	8.0735186
44	8.0736659	8.0736964
45	8.0738436	8.0738741
46	8.0740211	8.0740517
47	8.0741986	8.0742292
48	8.0743761	8.0744067
49	8.0745534	8.0745841
50	8.0747307	8.0747614
51	8.0749080	8.0749386
52	8.0750851	8.0751158
53	8.0752622	8.0752929
54	8.0754392	8.0754699
55	8.0756161	8.0756469
56	8.0757930	8.0758238
57	8.0759698	8.0760006
58	8.0761465	8.0761773
59	8.0763231	8.0763540

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Secund.	41 Minut. Log. Sin.	41 Minut. Log. Tang.	Secund.	41 Minut. Log. Sin.	41 Minut. Log. Tang.
0	8.0764997	8.0765306	30	8.0817637	8.0817953
1	8.0766762	8.0767071	31	8.0819380	8.0819697
2	8.0768526	8.0768835	32	8.0821123	8.0821440
3	8.0770290	8.0770599	33	8.0822866	8.0823183
4	8.0772052	8.0772362	34	8.0824607	8.0824925
5	8.0773815	8.0774125	35	8.0826348	8.0826666
6	8.0775576	8.0775886	36	8.0828088	8.0828406
7	8.0777337	8.0777647	37	8.0829828	8.0830146
8	8.0779097	8.0779407	38	8.0831567	8.0831885
9	8.0780856	8.0781167	39	8.0833305	8.0833624
10	8.0782614	8.0782926	40	8.0835042	8.0835361
11	8.0784372	8.0784684	41	8.0836779	8.0837098
12	8.0786129	8.0786441	42	8.0838515	8.0838835
13	8.0787886	8.0788198	43	8.0840251	8.0840570
14	8.0789641	8.0789954	44	8.0841985	8.0842305
15	8.0791396	8.0791709	45	8.0843719	8.0844039
16	8.0793151	8.0793464	46	8.0845452	8.0845773
17	8.0794904	8.0795218	47	8.0847185	8.0847506
18	8.0796657	8.0796971	48	8.0848917	8.0849238
19	8.0798409	8.0798723	49	8.0850648	8.0850969
20	8.0800161	8.0800475	50	8.0852379	8.0852700
21	8.0801912	8.0802226	51	8.0854109	8.0854430
22	8.0803662	8.0803976	52	8.0855838	8.0856160
23	8.0805411	8.0805726	53	8.0857566	8.0857888
24	8.0807160	8.0807475	54	8.0859294	8.0859616
25	8.0808908	8.0809223	55	8.0861021	8.0861344
26	8.0810655	8.0810970	56	8.0862747	8.0863070
27	8.0812401	8.0812717	57	8.0864473	8.0864796
28	8.0814147	8.0814463	58	8.0866198	8.0866522
29	8.0815892	8.0816208	59	8.0867922	8.0868246

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42 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.0869646	8.0869970
1	8.0871369	8.0871693
2	8.0873091	8.0873416
3	8.0874813	8.0875138
4	8.0876534	8.0876859
5	8.0878254	8.0878579
6	8.0879974	8.0880299
7	8.0881692	8.0882018
8	8.0883411	8.0883737
9	8.0885128	8.0885455
10	8.0886845	8.0887172
11	8.0888561	8.0888888
12	8.0890277	8.0890604
13	8.0891991	8.0892319
14	8.0893706	8.0894033
15	8.0895419	8.0895747
16	8.0897132	8.0897460
17	8.0898844	8.0899172
18	8.0900555	8.0900884
19	8.0902266	8.0902595
20	8.0903976	8.0904305
21	8.0905685	8.0906015
22	8.0907394	8.0907724
23	8.0909102	8.0909432
24	8.0910810	8.0911140
25	8.0912516	8.0912847
26	8.0914222	8.0914553
27	8.0915928	8.0916259
28	8.0917632	8.0917964
29	8.0919336	8.0919668
30	8.0921040	8.0921372
31	8.0922743	8.0923075
32	8.0924445	8.0924777
33	8.0926146	8.0926479
34	8.0927847	8.0928180
35	8.0929547	8.0929880
36	8.0931246	8.0931579
37	8.0932945	8.0933278
38	8.0934643	8.0934977
39	8.0936340	8.0936674
40	8.0938037	8.0938371
41	8.0939733	8.0940068
42	8.0941428	8.0941763
43	8.0943123	8.0943458
44	8.0944817	8.0945153
45	8.0946510	8.0946846
46	8.0948203	8.0948539
47	8.0949895	8.0950232
48	8.0951587	8.0951923
49	8.0953277	8.0953614
50	8.0954968	8.0955305
51	8.0956657	8.0956994
52	8.0958346	8.0958683
53	8.0960034	8.0960372
54	8.0961721	8.0962060
55	8.0963408	8.0963747
56	8.0965094	8.0965433
57	8.0966780	8.0967119
58	8.0968465	8.0968804
59	8.0970149	8.0970488

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Secund.	43 Minut.	
	Log. Sin.	*Log. Tang.*
0	8.0971832	8.0972172
1	8.0973515	8.0973855
2	8.0975198	8.0975538
3	8.0976879	8.0977220
4	8.0978560	8.0978901
5	8.0980240	8.0980582
6	8.0981920	8.0982261
7	8.0983599	8.0983941
8	8.0985277	8.0985619
9	8.0986955	8.0987297
10	8.0988632	8.0988975
11	8.0990309	8.0990651
12	8.0991984	8.0992327
13	8.0993659	8.0994003
14	8.0995334	8.0995667
15	8.0997008	8.0997351
16	8.0998681	8.0999025
17	8.1000353	8.1000698
18	8.1002025	8.1002370
19	8.1003697	8.1004041
20	8.1005367	8.1005712
21	8.1007037	8.1007382
22	8.1008706	8.1009052
23	8.1010375	8.1010721
24	8.1012043	8.1012389
25	8.1013710	8.1014057
26	8.1015377	8.1015724
27	8.1017043	8.1017390
28	8.1018709	8.1019056
29	8.1020374	8.1020721

Secund.	43 Minut.	
	Log. Sin.	*Log. Tang.*
30	8.1022038	8.1022386
31	8.1023701	8.1024049
32	8.1025364	8.1025713
33	8.1027027	8.1027375
34	8.1028688	8.1029037
35	8.1030349	8.1030698
36	8.1032010	8.1032359
37	8.1033669	8.1034019
38	8.1035328	8.1035678
39	8.1036987	8.1037337
40	8.1038645	8.1038995
41	8.1040302	8.1040653
42	8.1041959	8.1042309
43	8.1043615	8.1043966
44	8.1045270	8.1045621
45	8.1046925	8.1047276
46	8.1048579	8.1048931
47	8.1050232	8.1050584
48	8.1051885	8.1052237
49	8.1053537	8.1053890
50	8.1055188	8.1055542
51	8.1056839	8.1057193
52	8.1058490	8.1058843
53	8.1060139	8.1060493
54	8.1061788	8.1062142
55	8.1063437	8.1063791
56	8.1065085	8.1065439
57	8.1066732	8.1067087
58	8.1068378	8.1068733
59	8.1070024	8.1070380

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Secund.	44 Minut. Log. Sin.	Log. Tang.	Secund.	44 Minut. Log. Sin.	Log. Tang.
0	8.1071669	8.1072025	30	8.1120740	8.1121104
1	8.1073314	8.1073670	31	8.1122366	8.1122730
2	8.1074958	8.1075314	32	8.1123992	8.1124356
3	8.1076601	8.1076958	33	8.1125617	8.1125981
4	8.1078244	8.1078601	34	8.1127241	8.1127606
5	8.1079886	8.1080243	35	8.1128865	8.1129230
6	8.1081528	8.1081885	36	8.1130488	8.1130853
7	8.1083169	8.1083526	37	8.1132110	8.1132476
8	8.1084809	8.1085167	38	8.1133732	8.1134098
9	8.1086449	8.1086807	39	8.1135354	8.1135720
10	8.1088088	8.1088446	40	8.1136974	8.1137341
11	8.1089726	8.1090085	41	8.1138595	8.1138961
12	8.1091364	8.1091723	42	8.1140214	8.1140581
13	8.1093001	8.1093361	43	8.1141833	8.1142200
14	8.1094638	8.1094998	44	8.1143451	8.1143819
15	8.1096274	8.1096634	45	8.1145069	8.1145437
16	8.1097909	8.1098269	46	8.1146686	8.1147054
17	8.1099544	8.1099904	47	8.1148302	8.1148671
18	8.1101178	8.1101539	48	8.1149918	8.1150287
19	8.1102812	8.1103173	49	8.1151534	8.1151903
20	8.1104445	8.1104806	50	8.1153148	8.1153518
21	8.1106077	8.1106438	51	8.1154762	8.1155132
22	8.1107709	8.1108070	52	8.1156376	8.1156746
23	8.1109340	8.1109702	53	8.1157989	8.1158359
24	8.1110970	8.1111332	54	8.1159601	8.1159972
25	8.1112600	8.1112962	55	8.1161213	8.1161584
26	8.1114229	8.1114592	56	8.1162824	8.1163195
27	8.1115858	8.1116221	57	8.1164434	8.1164806
28	8.1117486	8.1117849	58	8.1166044	8.1166416
29	8.1119113	8.1119477	59	8.1167654	8.1168025

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Secund.	45 Minut. Log. Sin.	45 Minut. Log. Tang.
0	8.1169262	8.1169634
1	8.1170870	8.1171243
2	8.1172478	8.1172851
3	8.1174085	8.1174458
4	8.1175691	8.1176064
5	8.1177297	8.1177670
6	8.1178902	8.1179276
7	8.1180507	8.1180881
8	8.1182111	8.1182485
9	8.1183714	8.1184088
10	8.1185317	8.1185691
11	8.1186919	8.1187294
12	8.1188520	8.1188896
13	8.1190121	8.1190497
14	8.1191722	8.1192098
15	8.1193322	8.1193698
16	8.1194921	8.1195297
17	8.1196519	8.1196896
18	8.1198118	8.1198495
19	8.1199715	8.1200092
20	8.1201312	8.1201689
21	8.1202908	8.1203286
22	8.1204504	8.1204882
23	8.1206099	8.1206477
24	8.1207693	8.1208072
25	8.1209287	8.1209666
26	8.1210881	8.1211260
27	8.1212474	8.1212853
28	8.1214066	8.1214446
29	8.1215657	8.1216037

Secund.	45 Minut. Log. Sin.	45 Minut. Log. Tang.
30	8.1217248	8.1217629
31	8.1218839	8.1219219
32	8.1220429	8.1220810
33	8.1222018	8.1222399
34	8.1223607	8.1223988
35	8.1225195	8.1225577
36	8.1226782	8.1227164
37	8.1228369	8.1228752
38	8.1229956	8.1230338
39	8.1231541	8.1231924
40	8.1233127	8.1233510
41	8.1234711	8.1235095
42	8.1236295	8.1236679
43	8.1237879	8.1238263
44	8.1239462	8.1239846
45	8.1241044	8.1241429
46	8.1242626	8.1243011
47	8.1244207	8.1244592
48	8.1245787	8.1246173
49	8.1247367	8.1247753
50	8.1248947	8.1249333
51	8.1250526	8.1250912
52	8.1252104	8.1252491
53	8.1253682	8.1254069
54	8.1255259	8.1255646
55	8.1256836	8.1257223
56	8.1258412	8.1258799
57	8.1259987	8.1260375
58	8.1261562	8.1261950
59	8.1263136	8.1263525

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46 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.1264710	8.1265099
1	8.1266283	8.1266672
2	8.1267856	8.1268245
3	8.1269428	8.1269817
4	8.1270999	8.1271389
5	8.1272570	8.1272960
6	8.1274140	8.1274531
7	8.1275710	8.1276101
8	8.1277279	8.1277670
9	8.1278848	8.1279239
10	8.1280416	8.1280807
11	8.1281983	8.1282375
12	8.1283550	8.1283942
13	8.1285117	8.1285509
14	8.1286682	8.1287075
15	8.1288248	8.1288641
16	8.1289812	8.1290206
17	8.1291376	8.1291770
18	8.1292940	8.1293334
19	8.1294503	8.1294897
20	8.1296065	8.1296460
21	8.1297627	8.1298022
22	8.1299188	8.1299583
23	8.1300749	8.1301144
24	8.1302309	8.1302705
25	8.1303869	8.1304265
26	8.1305428	8.1305824
27	8.1306986	8.1307383
28	8.1308544	8.1308941
29	8.1310101	8.1310498

46 Minut.

Secund.	Log. Sin.	Log. Tang.
30	8.1311658	8.1312056
31	8.1313215	8.1313612
32	8.1314770	8.1315168
33	8.1316325	8.1316723
34	8.1317880	8.1318278
35	8.1319434	8.1319833
36	8.1320987	8.1321386
37	8.1322540	8.1322940
38	8.1324093	8.1324492
39	8.1325644	8.1326044
40	8.1327196	8.1327596
41	8.1328746	8.1329147
42	8.1330296	8.1330697
43	8.1331846	8.1332247
44	8.1333395	8.1333796
45	8.1334943	8.1335345
46	8.1336491	8.1336893
47	8.1338039	8.1338441
48	8.1339586	8.1339988
49	8.1341132	8.1341535
50	8.1342678	8.1343081
51	8.1344223	8.1344626
52	8.1345767	8.1346171
53	8.1347311	8.1347715
54	8.1348855	8.1349259
55	8.1350398	8.1350802
56	8.1351940	8.1352345
57	8.1353482	8.1353887
58	8.1355023	8.1355429
59	8.1356564	8.1356970

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Secund.	47 Minut. Log. Sin.	Log. Tang.	Secund.	47 Minut. Log. Sin.	Log. Tang.
0	8.1358104	8.1358510	30	8.1404059	8.1404474
1	8.1359644	8.1360050	31	8.1405583	8.1405997
2	8.1361183	8.1361590	32	8.1407105	8.1407521
3	8.1362722	8.1363129	33	8.1408628	8.1409043
4	8.1364260	8.1364667	34	8.1410150	8.1410566
5	8.1365797	8.1366205	35	8.1411671	8.1412087
6	8.1367334	8.1367742	36	8.1413192	8.1413608
7	8.1368871	8.1369279	37	8.1414712	8.1415129
8	8.1370407	8.1370815	38	8.1416232	8.1416649
9	8.1371942	8.1372350	39	8.1417751	8.1418168
10	8.1373477	8.1373886	40	8.1419270	8.1419687
11	8.1375011	8.1375420	41	8.1420788	8.1421206
12	8.1376545	8.1376954	42	8.1422306	8.1422724
13	8.1378078	8.1378488	43	8.1423823	8.1424241
14	8.1379610	8.1380020	44	8.1425339	8.1425758
15	8.1381143	8.1381553	45	8.1426855	8.1427274
16	8.1382674	8.1383085	46	8.1428371	8.1428790
17	8.1384205	8.1384616	47	8.1429886	8.1430305
18	8.1385736	8.1386147	48	8.1431400	8.1431820
19	8.1387265	8.1387677	49	8.1432914	8.1433334
20	8.1388795	8.1389207	50	8.1434427	8.1434848
21	8.1390324	8.1390736	51	8.1435940	8.1436361
22	8.1391852	8.1392264	52	8.1437453	8.1437874
23	8.1393380	8.1393792	53	8.1438964	8.1439386
24	8.1394907	8.1395320	54	8.1440476	8.1440897
25	8.1396434	8.1396847	55	8.1441987	8.1442408
26	8.1397960	8.1398373	56	8.1443497	8.1443919
27	8.1399485	8.1399899	57	8.1445006	8.1445429
28	8.1401011	8.1401425	58	8.1446516	8.1446938
29	8.1402535	8.1402949	59	8.1448024	8.1448447

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48 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.1449532	8.1449956
1	8.1451040	8.1451464
2	8.1452547	8.1452971
3	8.1454054	8.1454478
4	8.1455560	8.1455984
5	8.1457065	8.1457490
6	8.1458570	8.1458995
7	8.1460075	8.1460500
8	8.1461579	8.1462004
9	8.1463082	8.1463508
10	8.1464585	8.1465011
11	8.1466087	8.1466514
12	8.1467589	8.1468016
13	8.1469091	8.1469518
14	8.1470591	8.1471019
15	8.1472092	8.1472520
16	8.1473592	8.1474020
17	8.1475091	8.1475519
18	8.1476590	8.1477018
19	8.1478088	8.1478517
20	8.1479586	8.1480015
21	8.1481083	8.1481512
22	8.1482579	8.1483009
23	8.1484076	8.1484506
24	8.1485571	8.1486002
25	8.1487066	8.1487497
26	8.1488561	8.1488992
27	8.1490055	8.1490487
28	8.1491549	8.1491980
29	8.1493042	8.1493474
30	8.1494534	8.1494967
31	8.1496027	8.1496459
32	8.1497518	8.1497951
33	8.1499009	8.1499442
34	8.1500500	8.1500933
35	8.1501990	8.1502423
36	8.1503479	8.1503913
37	8.1504968	8.1505402
38	8.1506457	8.1506891
39	8.1507945	8.1508380
40	8.1509432	8.1509867
41	8.1510919	8.1511355
42	8.1512406	8.1512841
43	8.1513891	8.1514328
44	8.1515377	8.1515813
45	8.1516862	8.1517299
46	8.1518346	8.1518783
47	8.1519830	8.1520267
48	8.1521314	8.1521751
49	8.1522796	8.1523234
50	8.1524279	8.1524717
51	8.1525761	8.1526199
52	8.1527242	8.1527681
53	8.1528723	8.1529162
54	8.1530203	8.1530643
55	8.1531683	8.1532123
56	8.1533163	8.1533603
57	8.1534641	8.1535082
58	8.1536120	8.1536560
59	8.1537598	8.1538038

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Secund.	49 Minut.	
	Log. Sin.	Log. Tang.
0	8.1539075	8.1539516
1	8.1540552	8.1540993
2	8.1542028	8.1542470
3	8.1543504	8.1543946
4	8.1544979	8.1545422
5	8.1546454	8.1546897
6	8.1547928	8.1548371
7	8.1549402	8.1549846
8	8.1550876	8.1551319
9	8.1552348	8.1552792
10	8.1553821	8.1554265
11	8.1555293	8.1555737
12	8.1556764	8.1557209
13	8.1558235	8.1558680
14	8.1559705	8.1560151
15	8.1561175	8.1561621
16	8.1562644	8.1563090
17	8.1564113	8.1564559
18	8.1565582	8.1566028
19	8.1567049	8.1567496
20	8.1568517	8.1568964
21	8.1569984	8.1570431
22	8.1571450	8.1571898
23	8.1572916	8.1573364
24	8.1574381	8.1574830
25	8.1575846	8.1576295
26	8.1577310	8.1577759
27	8.1578774	8.1579224
28	8.1580238	8.1580687
29	8.1581701	8.1582151

Secund.	49 Minut.	
	Log. Sin.	Log. Tang.
30	8.1583163	8.1583613
31	8.1584625	8.1585076
32	8.1586086	8.1586537
33	8.1587547	8.1587999
34	8.1589008	8.1589459
35	8.1590468	8.1590920
36	8.1591927	8.1592379
37	8.1593386	8.1593839
38	8.1594845	8.1595297
39	8.1596303	8.1596756
40	8.1597760	8.1598213
41	8.1599217	8.1599671
42	8.1600674	8.1601128
43	8.1602130	8.1602584
44	8.1603585	8.1604040
45	8.1605040	8.1605495
46	8.1606495	8.1606950
47	8.1607949	8.1608404
48	8.1609403	8.1609858
49	8.1610856	8.1611312
50	8.1612308	8.1612765
51	8.1613761	8.1614217
52	8.1615212	8.1615669
53	8.1616663	8.1617121
54	8.1618114	8.1618572
55	8.1619564	8.1620022
56	8.1621014	8.1621472
57	8.1622463	8.1622922
58	8.1623912	8.1624371
59	8.1625360	8.1625819

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50 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.1626808	8.1627267
1	8.1628255	8.1628715
2	8.1629702	8.1630162
3	8.1631149	8.1631609
4	8.1632594	8.1633055
5	8.1634040	8.1634501
6	8.1635485	8.1635946
7	8.1636929	8.1637391
8	8.1638373	8.1638835
9	8.1639817	8.1640279
10	8.1641259	8.1641722
11	8.1642702	8.1643165
12	8.1644144	8.1644607
13	8.1645586	8.1646049
14	8.1647027	8.1647490
15	8.1648467	8.1648931
16	8.1649907	8.1650372
17	8.1651347	8.1651812
18	8.1652786	8.1653251
19	8.1654225	8.1654690
20	8.1655663	8.1656128
21	8.1657101	8.1657566
22	8.1658538	8.1659004
23	8.1659975	8.1660441
24	8.1661411	8.1661878
25	8.1662847	8.1663314
26	8.1664282	8.1664749
27	8.1665717	8.1666185
28	8.1667151	8.1667619
29	8.1668585	8.1669054
30	8.1670019	8.1670487
31	8.1671452	8.1671921
32	8.1672884	8.1673353
33	8.1674316	8.1674786
34	8.1675748	8.1676218
35	8.1677179	8.1677649
36	8.1678610	8.1679080
37	8.1680040	8.1680510
38	8.1681469	8.1681940
39	8.1682899	8.1683370
40	8.1684327	8.1684799
41	8.1685756	8.1686228
42	8.1687183	8.1687656
43	8.1688611	8.1689083
44	8.1690038	8.1690510
45	8.1691464	8.1691937
46	8.1692890	8.1693363
47	8.1694315	8.1694789
48	8.1695740	8.1696214
49	8.1697165	8.1697639
50	8.1698589	8.1699064
51	8.1700012	8.1700487
52	8.1701435	8.1701911
53	8.1702858	8.1703334
54	8.1704280	8.1704756
55	8.1705702	8.1706178
56	8.1707123	8.1707600
57	8.1708544	8.1709021
58	8.1709964	8.1710442
59	8.1711384	8.1711862

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Secund.	51 Minut. Log. Sin.	Log. Tang.	Secund.	51 Minut. Log. Sin.	Log. Tang.
0	8.1712804	8.1713282	30	8.1755171	8.1755658
1	8.1714223	8.1714701	31	8.1756576	8.1757064
2	8.1715641	8.1716120	32	8.1757981	8.1758469
3	8.1717059	8.1717538	33	8.1759385	8.1759873
4	8.1718477	8.1718956	34	8.1760789	8.1761278
5	8.1719894	8.1720373	35	8.1762192	8.1762681
6	8.1721310	8.1721790	36	8.1763595	8.1764084
7	8.1722726	8.1723207	37	8.1764998	8.1765487
8	8.1724142	8.1724623	38	8.1766400	8.1766889
9	8.1725557	8.1726038	39	8.1767801	8.1768291
10	8.1726972	8.1727453	40	8.1769202	8.1769693
11	8.1728386	8.1728868	41	8.1770603	8.1771094
12	8.1729800	8.1730282	42	8.1772003	8.1772494
13	8.1731214	8.1731696	43	8.1773403	8.1773894
14	8.1732627	8.1733109	44	8.1774802	8.1775294
15	8.1734039	8.1734522	45	8.1776201	8.1776693
16	8.1735451	8.1735934	46	8.1777599	8.1778091
17	8.1736863	8.1737346	47	8.1778997	8.1779490
18	8.1738274	8.1738757	48	8.1780394	8.1780887
19	8.1739684	8.1740168	49	8.1781791	8.1782285
20	8.1741094	8.1741579	50	8.1783188	8.1783682
21	8.1742504	8.1742989	51	8.1784584	8.1785078
22	8.1743913	8.1744398	52	8.1785980	8.1786474
23	8.1745322	8.1745807	53	8.1787375	8.1787870
24	8.1746731	8.1747216	54	8.1788770	8.1789265
25	8.1748138	8.1748624	55	8.1790164	8.1790659
26	8.1749546	8.1750032	56	8.1791558	8.1792054
27	8.1750953	8.1751439	57	8.1792951	8.1793447
28	8.1752359	8.1752846	58	8.1794344	8.1794841
29	8.1753765	8.1754252	59	8.1795737	8.1796233

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Secund.	52 Minut. Log. Sin.	Log. Tang.
0	8.1797129	8.1797626
1	8.1798521	8.1799018
2	8.1799912	8.1800409
3	8.1801303	8.1801800
4	8.1802693	8.1803191
5	8.1804083	8.1804581
6	8.1805472	8.1805971
7	8.1806861	8.1807360
8	8.1808250	8.1808749
9	8.1809638	8.1810137
10	8.1811025	8.1811525
11	8.1812413	8.1812913
12	8.1813799	8.1814300
13	8.1815186	8.1815687
14	8.1816571	8.1817073
15	8.1817957	8.1818459
16	8.1819342	8.1819844
17	8.1820726	8.1821229
18	8.1822111	8.1822613
19	8.1823494	8.1823997
20	8.1824877	8.1825381
21	8.1826260	8.1826764
22	8.1827643	8.1828146
23	8.1829024	8.1829529
24	8.1830406	8.1830910
25	8.1831787	8.1832292
26	8.1833167	8.1833673
27	8.1834548	8.1835053
28	8.1835927	8.1836433
29	8.1837307	8.1837813
30	8.1838685	8.1839192
31	8.1840064	8.1840571
32	8.1841442	8.1841949
33	8.1842819	8.1843327
34	8.1844195	8.1844704
35	8.1845573	8.1846081
36	8.1846949	8.1847458
37	8.1848325	8.1848834
38	8.1849700	8.1850209
39	8.1851075	8.1851585
40	8.1852450	8.1852959
41	8.1853824	8.1854334
42	8.1855197	8.1855708
43	8.1856570	8.1857081
44	8.1857943	8.1858454
45	8.1859315	8.1859827
46	8.1860687	8.1861199
47	8.1862059	8.1862571
48	8.1863430	8.1863942
49	8.1864800	8.1865313
50	8.1866170	8.1866683
51	8.1867540	8.1868053
52	8.1868909	8.1869423
53	8.1870278	8.1870792
54	8.1871646	8.1872161
55	8.1873014	8.1873529
56	8.1874382	8.1874897
57	8.1875749	8.1876264
58	8.1877116	8.1877631
59	8.1878482	8.1878998

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Secund.	53 Minut. Log. Sin.	53 Minut. Log. Tang.
0	8.1879848	8.1880364
1	8.1881213	8.1881730
2	8.1882578	8.1883095
3	8.1883943	8.1884460
4	8.1885307	8.1885824
5	8.1886670	8.1887188
6	8.1888034	8.1888552
7	8.1889397	8.1889915
8	8.1890759	8.1891278
9	8.1892121	8.1892640
10	8.1893482	8.1894002
11	8.1894843	8.1895363
12	8.1896204	8.1896724
13	8.1897564	8.1898085
14	8.1898924	8.1899445
15	8.1900284	8.1900805
16	8.1901643	8.1902164
17	8.1903001	8.1903523
18	8.1904359	8.1904881
19	8.1905717	8.1906239
20	8.1907074	8.1907597
21	8.1908431	8.1908954
22	8.1909788	8.1910311
23	8.1911144	8.1911667
24	8.1912499	8.1913023
25	8.1913854	8.1914379
26	8.1915209	8.1915734
27	8.1916563	8.1917088
28	8.1917917	8.1918442
29	8.1919271	8.1919796
30	8.1920624	8.1921150
31	8.1921976	8.1922503
32	8.1923329	8.1923855
33	8.1924680	8.1925207
34	8.1926032	8.1926559
35	8.1927383	8.1927910
36	8.1928733	8.1929261
37	8.1930083	8.1930611
38	8.1931433	8.1931961
39	8.1932782	8.1933311
40	8.1934131	8.1934660
41	8.1935479	8.1936009
42	8.1936827	8.1937357
43	8.1938175	8.1938705
44	8.1939522	8.1940053
45	8.1940869	8.1941400
46	8.1942215	8.1942746
47	8.1943561	8.1944093
48	8.1944907	8.1945439
49	8.1946252	8.1946784
50	8.1947596	8.1948129
51	8.1948941	8.1949473
52	8.1950284	8.1950818
53	8.1951628	8.1952161
54	8.1952971	8.1953505
55	8.1954313	8.1954848
56	8.1955656	8.1956190
57	8.1956997	8.1957532
58	8.1958339	8.1958874
59	8.1959680	8.1960215

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54 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.1961020	8.1961556
1	8.1962360	8.1962896
2	8.1963700	8.1964236
3	8.1965039	8.1965576
4	8.1966378	8.1966915
5	8.1967717	8.1968254
6	8.1969055	8.1969592
7	8.1970392	8.1970930
8	8.1971729	8.1972268
9	8.1973066	8.1973605
10	8.1974403	8.1974942
11	8.1975739	8.1976278
12	8.1977074	8.1977614
13	8.1978409	8.1978949
14	8.1979744	8.1980284
15	8.1981078	8.1981619
16	8.1982412	8.1982953
17	8.1983746	8.1984287
18	8.1985079	8.1985621
19	8.1986412	8.1986954
20	8.1987744	8.1988286
21	8.1989076	8.1989619
22	8.1990407	8.1990950
23	8.1991738	8.1992282
24	8.1993069	8.1993613
25	8.1994399	8.1994943
26	8.1995729	8.1996273
27	8.1997058	8.1997603
28	8.1998387	8.1998933
29	8.1999716	8.2000262

54 Minut.

Secund.	Log. Sin.	Log. Tang.
30	8.2001044	8.2001590
31	8.2002372	8.2002918
32	8.2003699	8.2004246
33	8.2005026	8.2005573
34	8.2006353	8.2006900
35	8.2007679	8.2008227
36	8.2009005	8.2009553
37	8.2010330	8.2010879
38	8.2011655	8.2012204
39	8.2012980	8.2013529
40	8.2014304	8.2014853
41	8.2015628	8.2016177
42	8.2016951	8.2017501
43	8.2018274	8.2018824
44	8.2019597	8.2020147
45	8.2020919	8.2021470
46	8.2022241	8.2022792
47	8.2023562	8.2024113
48	8.2024883	8.2025435
49	8.2026203	8.2026756
50	8.2027523	8.2028076
51	8.2028843	8.2029396
52	8.2030163	8.2030716
53	8.2031481	8.2032035
54	8.2032800	8.2033354
55	8.2034118	8.2034672
56	8.2035436	8.2035990
57	8.2036753	8.2037308
58	8.2038070	8.2038625
59	8.2039387	8.2039942

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Secund.	55 Minut.	
	Log. Sin.	*Log. Tang.*
0	8.2040703	8.2041259
1	8.2042019	8.2042575
2	8.2043334	8.2043890
3	8.2044649	8.2045206
4	8.2045963	8.2046521
5	8.2047277	8.2047835
6	8.2048591	8.2049149
7	8.2049905	8.2050463
8	8.2051218	8.2051776
9	8.2052530	8.2053089
10	8.2053842	8.2054401
11	8.2055154	8.2055714
12	8.2056465	8.2057025
13	8.2057776	8.2058337
14	8.2059087	8.2059647
15	8.2060397	8.2060958
16	8.2061707	8.2062268
17	8.2063016	8.2063578
18	8.2064325	8.2064887
19	8.2065634	8.2066196
20	8.2066942	8.2067505
21	8.2068250	8.2068813
22	8.2069557	8.2070120
23	8.2070864	8.2071428
24	8.2072171	8.2072735
25	8.2073477	8.2074041
26	8.2074783	8.2075348
27	8.2076088	8.2076653
28	8.2077393	8.2077959
29	8.2078698	8.2079264

Secund.	55 Minut.	
	Log. Sin.	*Log. Tang.*
30	8.2080002	8.2080568
31	8.2081306	8.2081873
32	8.2082610	8.2083176
33	8.2083913	8.2084480
34	8.2085216	8.2085783
35	8.2086518	8.2087086
36	8.2087820	8.2088388
37	8.2089121	8.2089690
38	8.2090422	8.2090991
39	8.2091723	8.2092292
40	8.2093024	8.2093593
41	8.2094324	8.2094893
42	8.2095623	8.2096193
43	8.2096922	8.2097493
44	8.2098221	8.2098792
45	8.2099520	8.2100091
46	8.2100818	8.2101389
47	8.2102115	8.2102687
48	8.2103412	8.2103985
49	8.2104709	8.2105282
50	8.2106006	8.2106579
51	8.2107302	8.2107875
52	8.2108598	8.2109171
53	8.2109893	8.2110467
54	8.2111188	8.2111762
55	8.2112482	8.2113057
56	8.2113777	8.2114351
57	8.2115070	8.2115646
58	8.2116364	8.2116939
59	8.2117657	8.2118233

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56 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.2118949	8.2119526
1	8.2120242	8.2120818
2	8.2121533	8.2122110
3	8.2122825	8.2123402
4	8.2124116	8.2124694
5	8.2125407	8.2125985
6	8.2126697	8.2127275
7	8.2127987	8.2128566
8	8.2129277	8.2129855
9	8.2130566	8.2131145
10	8.2131854	8.2132434
11	8.2133143	8.2133723
12	8.2134431	8.2135011
13	8.2135719	8.2136299
14	8.2137006	8.2137587
15	8.2138293	8.2138874
16	8.2139579	8.2140161
17	8.2140865	8.2141447
18	8.2142151	8.2142733
19	8.2143436	8.2144019
20	8.2144721	8.2145304
21	8.2146006	8.2146589
22	8.2147290	8.2147874
23	8.2148574	8.2149158
24	8.2149857	8.2150442
25	8.2151140	8.2151725
26	8.2152423	8.2153008
27	8.2153705	8.2154291
28	8.2154987	8.2155573
29	8.2156269	8.2156855

56 Minut.

Secund.	Log. Sin.	Log. Tang.
30	8.2157550	8.2158137
31	8.2158831	8.2159418
32	8.2160111	8.2160699
33	8.2161391	8.2161979
34	8.2162671	8.2163259
35	8.2163950	8.2164539
36	8.2165229	8.2165818
37	8.2166508	8.2167097
38	8.2167786	8.2168375
39	8.2169064	8.2169653
40	8.2170341	8.2170931
41	8.2171618	8.2172209
42	8.2172895	8.2173486
43	8.2174171	8.2174762
44	8.2175447	8.2176038
45	8.2176723	8.2177314
46	8.2177998	8.2178590
47	8.2179273	8.2179865
48	8.2180547	8.2181140
49	8.2181821	8.2182414
50	8.2183095	8.2183688
51	8.2184368	8.2184962
52	8.2185641	8.2186235
53	8.2186913	8.2187508
54	8.2188186	8.2188780
55	8.2189457	8.2190053
56	8.2190729	8.2191324
57	8.2192000	8.2192596
58	8.2193270	8.2193867
59	8.2194541	8.2195137

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57 Minut.

Secund.	Log. Sin.	Log. Tang.
0	8.2195811	8.2196408
1	8.2197080	8.2197678
2	8.2198349	8.2198947
3	8.2199618	8.2200216
4	8.2200887	8.2201485
5	8.2202155	8.2202754
6	8.2203423	8.2204022
7	8.2204690	8.2205289
8	8.2205957	8.2206557
9	8.2207223	8.2207824
10	8.2208490	8.2209090
11	8.2209756	8.2210356
12	8.2211021	8.2211622
13	8.2212286	8.2212888
14	8.2213551	8.2214153
15	8.2214815	8.2215418
16	8.2216079	8.2216682
17	8.2217343	8.2217946
18	8.2218606	8.2219210
19	8.2219869	8.2220473
20	8.2221132	8.2221736
21	8.2222394	8.2222998
22	8.2223656	8.2224260
23	8.2224917	8.2225522
24	8.2226178	8.2226784
25	8.2227439	8.2228045
26	8.2228699	8.2229305
27	8.2229959	8.2230566
28	8.2231219	8.2231826
29	8.2232478	8.2233085

57 Minut.

Secund.	Log. Sin.	Log. Tang.
30	8.2233737	8.2234345
31	8.2234996	8.2235604
32	8.2236254	8.2236862
33	8.2237512	8.2238120
34	8.2238769	8.2239378
35	8.2240026	8.2240635
36	8.2241283	8.2241892
37	8.2242539	8.2243149
38	8.2243795	8.2244405
39	8.2245051	8.2245661
40	8.2246306	8.2246917
41	8.2247561	8.2248172
42	8.2248815	8.2249427
43	8.2250070	8.2250682
44	8.2251323	8.2251936
45	8.2252577	8.2253190
46	8.2253830	8.2254443
47	8.2255083	8.2255695
48	8.2256335	8.2256949
49	8.2257587	8.2258201
50	8.2258839	8.2259453
51	8.2260090	8.2260705
52	8.2261341	8.2261956
53	8.2262591	8.2263207
54	8.2263841	8.2264457
55	8.2265091	8.2265708
56	8.2266341	8.2266957
57	8.2267590	8.2268207
58	8.2268839	8.2269456
59	8.2270087	8.2270705

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Secund.	58 Minut. Log. Sin.	58 Minut. Log. Tang.	Secund.	58 Minut. Log. Sin.	58 Minut. Log. Tang.
0	8.2271335	8.2271953	30	8.2308610	8.2309239
1	8.2272583	8.2273201	31	8.2309847	8.2310476
2	8.2273830	8.2274449	32	8.2311084	8.2311713
3	8.2275077	8.2275696	33	8.2312320	8.2312950
4	8.2276324	8.2276943	34	8.2313556	8.2314186
5	8.2277570	8.2278190	35	8.2314792	8.2315422
6	8.2278816	8.2279436	36	8.2316027	8.2316658
7	8.2280061	8.2280682	37	8.2317262	8.2317893
8	8.2281306	8.2281927	38	8.2318496	8.2319128
9	8.2282551	8.2283173	39	8.2319731	8.2320363
10	8.2283796	8.2284417	40	8.2320965	8.2321597
11	8.2285040	8.2285662	41	8.2322198	8.2322831
12	8.2286284	8.2286906	42	8.2323431	8.2324064
13	8.2287527	8.2288150	43	8.2324664	8.2325297
14	8.2288770	8.2289393	44	8.2325896	8.2326530
15	8.2290013	8.2290636	45	8.2327128	8.2327763
16	8.2291255	8.2291879	46	8.2328360	8.2328995
17	8.2292497	8.2293121	47	8.2329592	8.2330227
18	8.2293739	8.2294363	48	8.2330823	8.2331458
19	8.2294980	8.2295605	49	8.2332053	8.2332689
20	8.2296221	8.2296846	50	8.2333284	8.2333920
21	8.2297461	8.2298087	51	8.2334514	8.2335150
22	8.2298701	8.2299327	52	8.2335743	8.2336380
23	8.2299941	8.2300568	53	8.2336973	8.2337610
24	8.2301181	8.2301807	54	8.2338202	8.2338839
25	8.2302420	8.2303047	55	8.2339430	8.2340068
26	8.2303659	8.2304286	56	8.2340659	8.2341297
27	8.2304897	8.2305525	57	8.2341886	8.2342525
28	8.2306135	8.2306763	58	8.2343114	8.2343753
29	8.2307373	8.2308001	59	8.2344341	8.2344980

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Secund.	59 Minut.	
	Log. Sin.	*Log. Tang.*
0	8.2345568	8.2346208
1	8.2346795	8.2347435
2	8.2348021	8.2348661
3	8.2349247	8.2349887
4	8.2350472	8.2351113
5	8.2351697	8.2352339
6	8.2352922	8.2353564
7	8.2354147	8.2354789
8	8.2355371	8.2356013
9	8.2356594	8.2357237
10	8.2357818	8.2358461
11	8.2359041	8.2359684
12	8.2360264	8.2360908
13	8.2361486	8.2362130
14	8.2362708	8.2363353
15	8.2363930	8.2364575
16	8.2365151	8.2365796
17	8.2366372	8.2367018
18	8.2367593	8.2368239
19	8.2368813	8.2369460
20	8.2370033	8.2370680
21	8.2371253	8.2371900
22	8.2372472	8.2373120
23	8.2373691	8.2374339
24	8.2374910	8.2375558
25	8.2376128	8.2376776
26	8.2377346	8.2377995
27	8.2378563	8.2379213
28	8.2379781	8.2380430
29	8.2380997	8.2381648

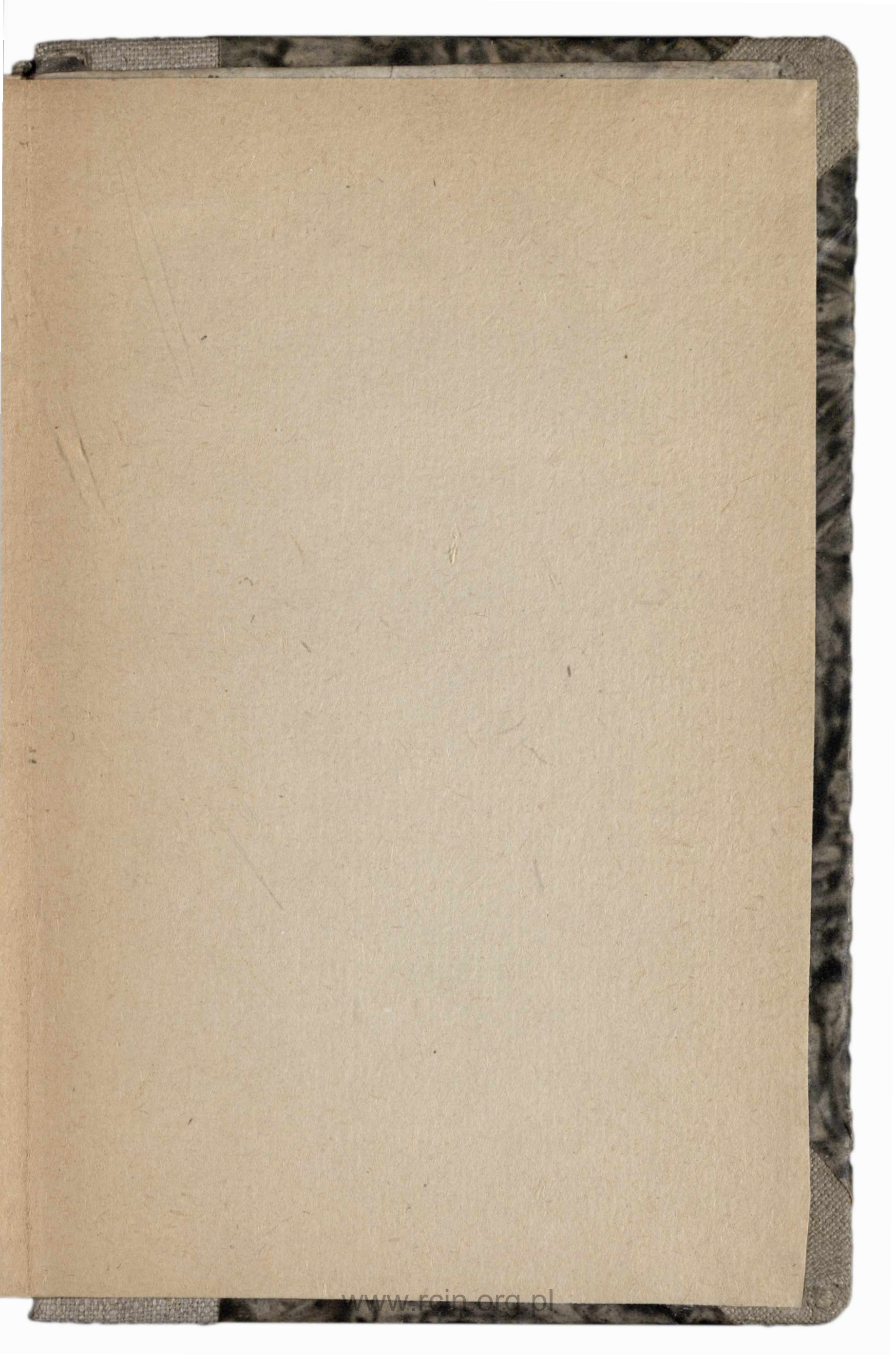
Secund.	59 Minut.	
	Log. Sin.	*Log. Tang.*
30	8.2382214	8.2382865
31	8.2383430	8.2384081
32	8.2384646	8.2385297
33	8.2385862	8.2386513
34	8.2387077	8.2387729
35	8.2388292	8.2388944
36	8.2389506	8.2390159
37	8.2390720	8.2391373
38	8.2391934	8.2392588
39	8.2393148	8.2393802
40	8.2394361	8.2395015
41	8.2395574	8.2396228
42	8.2396786	8.2397441
43	8.2397998	8.2398654
44	8.2399210	8.2399866
45	8.2400422	8.2401078
46	8.2401633	8.2402289
47	8.2402844	8.2403500
48	8.2404054	8.2404711
49	8.2405264	8.2405922
50	8.2406474	8.2407132
51	8.2407683	8.2408342
52	8.2408892	8.2409551
53	8.2410101	8.2410760
54	8.2411310	8.2411969
55	8.2412518	8.2413177
56	8.2413725	8.2414386
57	8.2414933	8.2415593
58	8.2416140	8.2416801
59	8.2417347	8.2418008

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